BluStrip

by WattUControl

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Diego Mamani

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Executive Summary

Our company brings home automation to the masses through an affordable alternative: BluStrip. Society is evolving and technology is becoming a key player in people's lives. Our company recognizes this and with our innovation we are able to offer new technology. We are devoted to enhancing the lives of our customers and constant improvement of our product.

Our company is made up of three students, covering a wide range of concentrations, specifically finance, electrical engineering, and computer science. Our ability to create a working prototype and its affiliated application proves the success of our company. Our key partnerships are made up of our four mentors. Two of our mentors are risk analysts and provide us with research and data about the home automation industry. The other two mentors are consultants and provide us with feedback about our management strategy, company structure, and financial statements. Moreover, this report provides a description of our product, an analysis and an evaluation of our product's prospective profitability and financial stability.

We recognize the demand for complete automation in society. We created a powerstrip that will use a Bluetooth connection to control appliances without manually turning them on and off. Furthermore, our interactive application can be accessed through smartphones, tablets, and computers. It is able to save preferences for each outlet in the powerstrip for consumer convenience. Consumers are willing to pay for our product because it offers control of multiple appliances at the same time, whereas competitor products only offer control of one appliance at a time.

This is an exciting growth opportunity because of the current state of the market. There is a huge market for home automation, as society is continuously pushing for automation in both the personal and professional settings. Additionally, people are connected to their smartphones, computers, and tablets now more than ever; the world relies on technology for daily functions. There are only a few companies who have entered this market, all recently. This allows us to capture a great amount of the market, giving our company a sustainable competitive advantage.

Vision Statement

We seek to make affordable home automation a part of everyone's life. We are constantly focusing on innovating, while placing emphasis on simplicity, not complexity. We believe that we need to participate only in markets where we can make a significant difference, starting with home automation. What is more, we do not settle for anything less than excellence in the technology backing our product.

Opportunity and Market Analysis

Through research of the marketplace, we have determined that the size of the home automation industry is approximately $3.5 billion; about a quarter of this embodies the powerstrip market. We strongly feel that BluStrip will be able to capture $4 million of this market by adopting consumers that are already interacting with home automation, in addition to expanding the market to those who rely on simple powerstrips.

Currently, there are only two options that cover the unsatisfied demands of this growing industry. The first option is a high-end product, which allows for control of multiple appliances within a home, but requires an electrician for installation at an extremely high price. The second option, a low-end version of home automation, only offers control of one appliance at a time for a more affordable price. Therefore, we feel the demand in this market is for an inexpensive and easy to use home automation system, which offers control of multiple appliances at once.

Our target market segments include young professionals, college students, young families, and the technology savvy. We are limiting our target market to these segments because we strongly believe that these will be the early adopters to our product, being the most technologically advanced. Moreover, from the data collected through our survey on the home automation market, we believe these are the segments that are willing to pay the greatest amount of money for home automation and will be the early adopters to BluStrip. The message of our product is convenience for young families, connectivity for college students and recent graduates, as well as efficiency for young professionals. The tech savvy will be intrigued by our new technology, setting off the initial sales of BluStrip. If we market our product as an inexpensive alternative that is both reliable and convenient, we will be able to strike the market and target these consumers. Additionally, we are able to market our product as versatile, by promoting its use in primary residences, secondary/vacation homes, as well as corporate offices.

We realize that reliability and convenience of the product play an enormous role in the success of its sale. We are seeking to develop an easier and cheaper alternative for home automation by creating the BluStrip; therefore, we are targeting the consumer electronics market. Our product targets two of the four major consumer markets: behavioral and demographic. We have divided the market into segments based on consumer knowledge, attitudes, uses, and responses to our product and competitors, as well as, variables such as age, life-cycle stage, income, and education.

We will market to individuals who are looking for a simple home automation system, which is appealing to both males and females. Moreover, since our product only requires three steps for installation (purchasing the product, downloading the application, and plugging in the power strip on location), it is extremely consumer-friendly, allowing most ages to use this product. A major advantage of BluStrip is it does not require a specialist for installation, reducing the cost of our product and increasing the ease of use. Considering the lower cost of our product compared to competitors' home automation systems, consumers with lower incomes will be more inclined to purchase the BluStrip, however, this does not limit our customer base to only lower-income consumers. It does not matter what life-cycle stage a consumer is experiencing, BluStrip's advantages are everlasting and its uses can benefit a majority of the market.

Since the market is currently showing a growth in demand for home automation, we feel that there is a lot of opportunity for our company and product in capturing a portion of the market. There are a few options that WattUControl can explore after the Business Plan Competition. These include the development of the product and sales through direct and indirect channels, as well as a joint venture or a buyout by a third party. We are determined to see our product reach the shelves of big retailers, first by selling through direct sales outlets; however, if WattUControl does not have the resources required for the manufacturing of our product, we will explore the opportunity of licensing our idea to a larger company, such as Hubbel or APC.

Industry and Business environment

In our research, we have found that our direct competitors are comprised of companies within the electronic industry; specifically, Belkin, Zsmart, Insteon, and The Clapper. Essentially, we will be competing against every company within the home automation market that handles control of electrical appliances, however, our direct competitors focus this control through a Bluetooth or WiFi connection. With BluStrip, we hope to offer an inexpensive and more convenient version of the competition, with a touch of innovation.

We offer a power strip that contains multiple outlets that can be controlled from an application, whereas, our competitors offer the control of only one outlet at a time for a similar price. Some of these competitors use a Bluetooth signal to control the outlets, while others use a WiFi signal. The biggest threat is a competitor who offers a Bluetooth-powered extension cord; however, BluStrip is different enough where it offers a sustainable competitive advantage. What differentiates BluStrip from our competitors is the number of outlets a consumer is able to control through a Bluetooth signal. BluStrip contains five outlets with Bluetooth control and one outlet without. The sixth outlet will always be "on", meaning the customer will not have control of the appliance that is plugged into it through a Bluetooth connection. We included this unique aspect into our product because, typically, an individual will have four or less appliances that need to be controlled through a Bluetooth connection and at least one appliance that needs constant power, such as a cable box. Moreover, the simplicity of installation, the price of the product, and the unique features are all factors that differentiate our product from competitors.

After thorough analysis of data collected based off of current market conditions, we believe it would be very easy to penetrate the market. This is due to a number of reasons, including the low entry and exit costs of the industry, lack of substitutes and threat of new entrants. Even though there has been an increased demand for home automation in the past decade, only a few companies have supplied products to please the demands of consumers. Since there is a limited amount of products offered for home automation, the threat of substitutes is limited. Moreover, the low entry and exit costs associated with the lower-end division of the industry facilitate entry into this market.

One of the biggest strategies to mitigate competitors is innovation. If WattUControl focuses on the constant improvement of BluStrip and innovation for future products, we will be able to moderate our competition and alleviate the threat of competitors. We plan on implementing product and software improvements based on customer feedback; for example, application upgrades. Also, we will provide thorough customer service and an extensive warranty program for our product to support our mission of achieving nothing less than excellence. Additionally, our company has access to resources specifically available for start-up companies, such as The Grove, a social space reserved for coworking and collaboration. We will use these resources to maintain a sustainable competitive advantage within the technology industry.

The Solution and Concept

BluStrip is an enhanced power strip that will be controlled using Bluetooth technology. Our product is an alternative to expensive and complex home automation systems already available in the market. It will feature five Bluetooth enabled sockets that can be independently controlled via an application. It also includes an extra socket that will provide continuous power for electronics. This socket is reserved for appliances that should not turn off abruptly, such as computers. Using a TI-cc2540 Texas Instrument Bluetooth micro-controller, the consumer will have the ability to manage electronics from a range of up to 120 feet. This will enable consumers to hide the wires of appliances, since they will be controlling the appliances from the application. Also, it will allow easier and quicker access to the control of appliances. Moreover, our product will result in aesthetically pleasing entertainment systems and workspaces.

There is a subset of appliances that consume power when "off". These appliances remain in standby mode ready to turn on from a push of a button. The electricity used by these devices is usually referred to as 'standby power', 'vampire power', 'phantom load', or 'leaking electricity'. The main disadvantage of having these devices continuously plugged into an outlet is increased power consumption. Since these appliances still consume power, for those who would like to manage their household power consumption for either economical or environmental reasons, this product is essential. Furthermore, those interested in power management will be glad to know that our micro-controller in the BluStrip is a low energy model that would run on less power than the amount it takes to run a watch. The customer will value the power to control home electronics, in addition to the ability to save money on their home electricity bill. Also, consumers will be at ease knowing that they are lowering their carbon footprint.

Currently, we have developed an early stage iPhone application that, with more research and development, will be ready for the Apple App Store when we launch the product. In the next month, we plan on expanding development to android devices. The application will feature easy-to-understand instructions for installation and setup of the product. It will allow you to have custom preferences regarding which set of devices will be active and which will be powered off. Prior to the presence of our product, individuals who seek home automation, specifically control over common electronics such as lights, computers, television sets, and home entertainment centers, would have to either purchase an expensive home automation system or manually unplug devices from outlets. Customers most likely to purchase and use BluStrip will be early adopters, eager to try affordable home automation, including those in small offices, college students, and the technologically savvy. There will also be many who will adopt the product seeking to lower their energy consumption for both environmental and economic motives.

Our product will be kept at a competitive price of $49.99 with a target unit manufacturing cost of $27. This cost includes manufacturing, assembly, packaging, and shipping. The product-selling price will leave us with a profit margin of 44% per unit. As the production of BluStrip increases, the unit cost will decrease. The average for the electronics market is a 50% profit margin per unit. Thus, by the end of the third year, we aim to obtain a 50% profit margin per unit. The average profit margin is what makes this business defendable. Moreover, our company's ability to produce the application, financial

statements, and a working prototype without the help of a third party shows how our skill set can be applied to this business.

Marketing, Promotion, and Sales

In order to promote BluStrip and our company, we will use the following marketing mediums: BlogSpot.com, Facebook, Cultofmac, Reddit, and Project Wonderful. We will set up a blog on BlogSpot.com to describe our product, BluStrip, as well as explain the vision of our company. Also, it will allow us to display our product on an interactive site where consumers can view different pages containing pictures of BluStrip, its configuration, and the accompanying application. Moreover, our blog will further our word of mouth marketing efforts and it can be promoted through social networking sites, such as Twitter and Facebook.

We have already created a Facebook for our company in order to start early marketing efforts. Facebook is one of the most popular and frequently used social networking sites. By using it, our company is advertised to our friends, networks, groups, and friends of our friends. The Internet is our primary source of word-of-mouth marketing. Moreover, the other supporting sites (Cultofmac, Reddit, and Project Wonderful) target followers of the technology market, which will help advertise our product to that niche market. These will kick-start our advertising, as the tech savvy is the segment willing to pay the most for BluStrip.

At first, our company will use direct sales to stimulate the market and our customer base. We need to find a channel that will tolerate low-volume order rates while also hitting our target markets, such as our company website, Kickstarter, Gizmodo, Macenstein, Amazon, and Ebay. Through our marketing efforts on various websites, we plan to build our market for BluStrip and create the first sales of our product. Once BluStrip is known in the marketplace and we have shown significant sales, our company will seek the sale of BluStrip through indirect sales channels. We will target resellers, such as BestBuy, QVC, and Target. Large retailers, such as the ones just mentioned, are interested in products that show a large movement, thus, we must first show that there is a large demand for our product and then seek a contract with retailers. Once we sign a contract for the sale of BluStrip at the big retailers, we will be taking up shelf space. Our next step will be to explore how WattUControl can obtain more shelf space, eliminating competitors from our sales channels.

We believe it is important to forecast the growth of BluStrip for the first three years of its sales. We predict that the first year of sales will result from word-of-mouth marketing and our sales efforts through the Internet. By using various websites to sell our product, multiple markets will be targeted. During the second year of business, BluStrip will be sold through resellers at a higher sales volume. In the third year of sales, BluStrip should hit an all time high and be sold in more stores than the initial bidding. Additionally, we will seek bundle opportunities, causing the market to relate it to more household items, such as extension cords or -------.

For our specific location (the tri-state area), we used a basic survey and a SWOT analysis to estimate the size of the market and potential market segments that we will target. First, we calculated the amount of households that need our product. Second, we estimated how much each household will spend on home automation annually. Last, we estimated what percentage of their spending we will get, compared to competitors.

Product Development and Operations

Currently, we have an extensive amount of research required for product development. We have begun constructing the powerstrip and microcontroller for the product. Also, the application User Interface is built, however, we are waiting for the completion of the prototype to test and improve the application. We plan on improving the application and making it more complex, so that it is user friendly and it features the ability to hold preferences for multiple sockets, as well as different interfaces.

In order to finish the product, we will need an official printed circuit board, once the prototype is approved. Also, we need electrical testing equipment to measure voltage and conduct semi-quality testing. An enhanced printed case, or shell, for all of the components is integral to our product. Research has been conducted to identify potential patent, nevertheless, it is imperative that our product does not interfere with any patent already filed. Additionally, the App Store has to approve our application and agree to host it for free.

Some of the key milestones in our timeline include concluding patent research and filing for a patent. In order to sign a contract with a manufacturer to order parts, a patent needs to be filed by June of 2013. Once a contract for production is signed, we can seek out direct sales outlets. Moreover, we predict the application to be finished by August of this year. Verifying the application for the App Store and Google Play requires a lot of attention, thus we are predicting this process to take about four months, bringing us to September of 2013. Lastly, we hope to be marketing BluStrip to target customers throughout this timeline in order to launch the product in the marketplace by October of this year.

We have conducted a lot of research regarding patent overlaps, however, we have not found anything that conflicts with our product. Currently, there are several patent wars regarding applications, something that concerns us greatly. We are in contact with a patent lawyer who is looking into this issue more and will hopefully be able to assist us in filing a patent for BluStrip. The only regulation on our product is that it must be six feet long because of the uniform building code, which states that there must be an outlet every twelve feet. Thus, we determined that our product must be at least half of that length in order to comply with the uniform building code.

As we finalize our product, we will be able to predict a failure rate. We are striving for a 0% failure rate, however, since we have not produced the product through a manufacturer, we are not sure of the failure rate. Due to this uncertainty, we have explored the option of a warranty. We think it is best to offer a two year warranty, which will guarantee replacement of the product upon failure if it is within two years of the purchase date.

Our product will contain a non-continuous connection in order to support the individual control of each appliance. In order to understand the engineering behind our product, we must explain the difference between a continuous and a non-continuous connection. A continuous connection power strip has all the terminals attached to a single power source, but is in series with the rest. The terminals will disconnect only by one switch, which gives power to all outlets, however it is controlled by one latch. A

non-continuous connection, also known as a parallel connection, is connected by many ways. All nodes and connections are individually powered by one source and have the same amount of latches to turn a single outlet on or off; each individual outlet is controlled by its own latch. All the components connected to the power source have the same voltage applied to them.

Team and Organization

WattUControl is composed of three students, each with a different major: Finance, Electrical Engineering, and Computer Science. The combination of these three educations brings an enormous amount of skill to our team. As a result, we are able to create the product, application, and business plan without a third party. This is a unique aspect, in that our team embodies all of the requirements for the construction of our company and product. Our company is determined to create a product that improves not only our lives, but also the lives of our friends and families. We are committed to opportunity because it gives us the chance to exercise what we learned from our education at Fairfield University. Moreover, we want to see the implementation of our innovative idea, the success of our product in the marketplace and the growth of our company in the future.

For the first year of the company's life, we will be able to conduct business with the current team and the resources available to us. However, for the continuation of our company, we will need to hire employees for quality control, marketing, and software developers. Currently, we have four advisors that are promoting our company and product; they include two consultants and two risk analysts. These four individuals fully endorse our product and strengthen our team by providing insight to concepts that are foreign to our company and experience in management and, specifically, start-up companies.

Risks

Since our product is new to the market and only parts of it exist, there are product development risks. Some of the most important risks involved with BluStrip are its reliability, robustness, depth of staff experience, financial resources, market reaction, and application complexity. We are unsure of the reliability of the device because of the Bluetooth connection. Also, we are assuming that the powerstrip will be as robust as other powerstrips in the marketplace.

Having a consistent team of compatible business managers, engineers, developers, quality controllers, as well as marketing and financial analysts will play a major role in the success of this business. The potential to grow the company internally is a risk we are willing to incur, however, there is an aspect of uncertainty that exists with expansion. In addition to employee salaries, we must consider the initial investment cost. Having the correct number of core employees and outside resources, such as contractors and manufacturers, is one of our main focuses as a startup.

Another major risk associated with our product is the market reaction. Even though we have surveyed the market for potential buyers and the market trend regarding home automation, there is still some risk that our product will not be successful. In order to mitigate this risk, we researched distinctive channels to market our product and various manufacturers for different prices for production. We are fully aware of the entry barriers for selling our products on the predicted websites and have started to work our way around these barriers. In researching the cost of producing the BluStrip, we received estimates for first order production, as well as second order production.

As our product evolves due to market demands, we will have to provide more testing to guarantee the functionality of the product. Moreover, we do not have the proper funding to test the prototype, thus, we are unable to declare the lifetime of the product or the reliability. Our proposed solution is to allocate seed money towards the quality testing of BluStrip. In order to increase the robustness of BluStrip, we will invest in a rugged rubber overlayer to place on top of the plastic shell of the powerstrip. If this material increases the manufacturing costs to more than thirty dollars per unit, we will use a stronger plastic for the shell of the powerstrip.

Another risk associated with BluStrip is the complexity of the application. We hope to receive consumer feedback regarding the application and its ease of use before releasing our product into the marketplace. In order for our product to be successful, the application must be easy to use, while fulfilling all of the customers' needs. Also, our product must be able to evolve with the changing market, and be seen as innovative, not obsolete. WattUControl has generated four innovations that can be added onto our initial product; a powerstrip with a second set of outlets so that there are two rows of outlets on the strip, "add-ons", which are attachments that can be connected to the initial powerstrip and that can allow the strip to be controlled through WiFi, a signal on the application that alerts the user when his/her residence is close to exhausting its electricity capacity, and an extension cord included in the powerstrip which would allow the customer to move the powerstrip away from the outlet providing more convenience.

In researching Bluetooth technology, we have realized there is a risk in using it, both as part of our product and as our logo. The body that oversees the development of Bluetooth standards and the licensing of Bluetooth technologies and trademarks to manufacturers is the Bluetooth Special Interest Group (SIG). Any company incorporating Bluetooth wireless technology into products, using the technology to offer goods and services or simply re-branding a product with Bluetooth technology must

become a member of the Bluetooth SIG. Adopter membership is free and entitles members to use published Bluetooth wireless specifications and Bluetooth trademarks. WattUControl will become part of Bluetooth SIG, allowing our product to be sold in the marketplace. Also, the qualification program allows access to the Bluetooth Qualification Experts (BQE's) and Bluetooth Qualification Test Facilities, two supporting services of the qualification process.

In order to achieve the most promising combination of significant capital gains potential, attractive investment possibilities, and actual implementation of our product, we will consult our risk register. The risk register is a feature used to measure the probability and impact of risks within a company. In analyzing the risk register, we have determined which risks are most threatening to the success of our company and product. Moreover, we created a plan to mitigate each risk in preparation for their occurrence and a contingency plan for the higher risk-scored ones. We have provided a copy of our risk register in Appendix B for further reference.

Financial Plan and Investment Offering

In order for our company to be successful in the development of our product, we are requesting $20,000 as an initial investment. This funding will supply quality testing for the product, manufacturing costs for production, and marketing for sales growth. We plan on funding our project through private investors in exchange for control of the company. The amount of money we receive from investors will determine the percent of ownership they receive. Moreover, with ownership comes profit, thus, the incentive of investing in our project is the potential for profit.

According to our Income Statement in Appendix A, our venture is forecasted to be positive in year two. Due to the large investment we predict to receive in the first year, cash flows are present starting in year one. However, this is not a correct measurement for profitability. Our Income Statement shows the company's net income, which does not consider the cash flow from an investor. Thus, our company will see a profit in year two. Moreover, we have to consider the unit manufacturing costs and at what point the volume drives down this cost. With more research, we will be able to determine if it is a stair step or gradual curve.

We strongly believe that there is a large growth potential for our company. With a focus on innovation, we seek to develop new technology and more products within the electronics industry; we are not stopping after one product. We want to continuously improve the home automation industry by introducing new products. Moreover, there is a large market that has not yet been captured by existing companies within this industry. Thus, we have the potential to gain loyalty from those consumers, as well as adopt consumers already using home automation.

Through extensive research, we have determined that a 50% gross margin is a typical percent for electronics. We could have a higher gross margin depending on the premium of our product. The two most central assumptions in our financial statements are the $20,000 investment in the first year and the sales growth for the first three years of production. Also, in calculating the manufacturing costs, we assumed the sum of damage protection and packaging costs because this device is sensitive enough to be damaged during shipping.

Moreover, we have considered all of the expenses involved with starting our company. These include rent space, marketing, initial deposits required for production, inventory, and patent costs. These expenses are overwhelming, however, we have shown that the company will be able to make a profit starting in year two, thus proving our product a success. We have calculated a Cash Flow Statement, as well as an Income Statement, for the first three years of the company, found in Appendix A.

Appendix A: *Pro Forma* Financial Plan

Our manufacturer has alerted us that the initial manufacturing costs will be higher than manufacturing costs in the future. This is because of the design of the product and the initial volume. Product and sales costs will decrease as the volume produced increases. Moreover, the specific design of our power strip heightens the initial product cost, which will only be factored into the first year costs. Also, our company considered the cost of packing and shipping. Since we are using a third party for the manufacturing of BluStrip, we will have to include the price of shipping, from the factory to our company's office, in the sales cost. Packaging will also increase the cost of sales, however, this will be less than the cost of shipping.

Furthermore, we believe the engineering support costs will prove to be the highest expense for our company. With the quality testing and the evolution of the product's hardware, our costs will increase. The equipment required for quality testing is incredibly expensive, therefore, we are researching other channels for testing, such as renting equipment or hiring a third party to complete this process.

Inputs:

	2014	2015	2016
Net Sales (in units)	300	675	1350
Net Sales (dollars)	$14,997.00	$33,743.25	$67,486.50
Sales Growth	125.00%	100.00%	75.00%
COGS per unit	$27	$14	$7
Annual COGS	$8,100	$9,113	$9,113
COGS as % of Sales	54.01%	27%	14%
SG&A as % of Sales	66.68%	86.68%	108.36%
Cash as % of Sales	481.71%	79%	71%

Income Statement:

	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015	201

Income Statement							
Net Sales		$3,749.25	$3,749.25	$3,749.25	$3,749.25	$33,743.25	$67,486.50
Cost of Sales		2,025	2,025	2,025	2,025	9,113	9,113
	Gross Profit	1,724	1,724	1,724	1,724	24,631	58,374
SG&A		2,500	2,500	2,500	2500	13,000	16,250
Depreciation		0	0	0	0	0	0
Net Interest Expense		0	0	0	0	0	0
	Pre-Tax Income	-776	-776	-776	-776	11,631	42,124
Income Taxes		0	0	0	0	3,954	14,322
	Net Income	-776	-776	-776	-776	7,676	27,802

Cash Flow Statement:

Cash Flow Statement							
		2014 Q1	**2014 Q2**	**2014 Q3**	**2014 Q4**	**2015**	**2016**
Beg. Balance		$100	18,849	18,198	17,797	17,396	26,586

Cash Flow from Financing	20,000	0	0	0	0	0
Cash Flow from Investing						
PP&E	1,500	1,000	750	750	4,000	4,000
Cash Flow from Operations						
Sales	3,749	3,749	3,749	3,749	33,743	67,487
Inventory	1,000	1,000	1,000	1,000	6,999	13,747
Expenses	2,400	2,400	2,400	2,400	9,600	14,400
Taxes	0	0	0	0	3,954	14,322
Net Cash Flow	18,849	18,198	17,797	17,396	26,586	47,603

Appendix B: Other Supplemental Materials

Risk Register

Risk I.D.	Risk Title	Risk Description	Probability (P) (1 Low - 10 High)	Impact (I) (L=1, M=2, H=3)	(P * I) = Total Risk Score	Mitigation Approach	More Detailed Contingency Plan Required? (Yes - or - No)
1	Robustness of power strip shell	Unsure of the life of BluStrip or the engineering materials iside of the product -- Unable to estimate how long the BluStrip can function for	**3**	**1**	**3**	Use rubber overlayer to protect outer shell of powerstrip	**No**

2	Reliability of Bluetooth connection	Do not have proper machines to test the reliability or span Bluetooth connection	**2**	**1**	**2**	Use investment money to purchase testing materials	**No**
3	Authorizing use of Bluetooth Technology in BluStrip	Required to register and qualify product with SIG for authorization to use Bluetooth technology and intellectual property	**5**	**2**	**10**	Apply to SIG for free membership -- access to BQE's (Bluetooth Qualification Experts) and BQTF's (Bluetooth Qualification Test Facilities) for support of qualification process	**No**
4	Authorizing use of Bluetooth symbol in company logo	Required to register and qualify product with SIG for authorization to use Bluetooth trademark and brand	**5**	**2**	**10**	Apply to SIG for free membership	**No**
5	Obtaining contract to manufacture product in bulk	Unsure of ability to reach agreement with manufacturer for bulk production of BluStrip	**7**	**3**	**21**	Explore licensing agreement options	**Yes**
6	Is our product patentable?	Possibility that our product interferes with an existing patent	**8**	**3**	**24**	Conduct a patent search and file a patent application -- in contact with patent lawyer and ready to file for a patent	**Yes**

						search and application	

Resumes of team members

Max Espinoza
60 Brookdale Ave, Milford CT 06460
203-283-9358
max.espinoza@student.fairfield.edu

EDUCATION

Fairfield University, Fairfield, CT
B.S. Computer Science and Mathematics **2013**

AWARDS
Dean's List (Spring 2010- Spring 2012) **2010-2012**
Christopher Blake Love Award 2012 **2012**
Pi Mu Epsilon (National Honors Mathematics society) Member **2012**

EXPERIENCE

Fairfield University, Fairfield, CT
Mathematic Department -Tutor **2010-Present**
Help students understand calculus fundamentals
Modify teaching style based on students' capability and personality
Review material with students in preparation for exams
On Campus-Private Math/CS Tutor **2010-Present**
Use strong interpersonal skills to create relaxed learning environment
Prepare study plans for tutees prior to exams
Create study material for each tutee to address

University of Connecticut, Storrs, CT
National Science Foundation, BioGRID REU Fellows **2012**
Familiarized with motif detection software with a concentration on randomized network generation algorithms
Analyzed different graph randomization methods and the topologies preserved from original networks

Compared results motif's found from multiple trials using various negative controls and a constant motif detection algorithm
Presented on research and results in the 2012 REU Summer Symposium at University of Connecticut

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PAPERS

University of Connecticut, Storrs, CT

Research Proposal BioGRID
On Network Randomization Methods: A Negative Control Study Proposal **2012**
Technical Report BioGRID Research
On Network Randomization Methods: A Negative Control Study
Compiled background on research and results found into a report with suggestions for future research in negative control in motif detection of software **2012**

LANGUAGES

· English – native language
· Spanish – native language

Jamie Ramerini

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Alternative Address: 9 Milemore Drive, Fort Salonga, NY 11768
Phone (516) 551-1519 • E-mail: Jamie.Ramerini@student.fairfield.edu

EDUCATION

Fairfield University **Fairfield, CT**
Bachelor of Science: Finance *May 2013*
Minors: Math and French
Cumulative GPA: 3.7 Major GPA: 3.8
Honors: Dean's List and National Foreign Language Honor Society (Alpha Mu Gamma)
Course Highlights: Financial Management, Futures & Options, Case Studies in Finance, International Finance, Ordinary Differential Equations, and Accelerated Statistics

Centre Parisien d'Études Critiques **Paris, France**
Contemporary French Studies *January 2012-May 2012*

WORK EXPERIENCE

General Electric Co – GE Capital **Stamford, CT**
State and Local Tax Intern (18-40 hrs/wk) *June 2012-September 2012*
• Prepare and file state tax returns and related excel spreadsheets for the state and local tax department of GE Capital
• Use the various GE state tax systems that are necessary to prepare related tax work papers and state & local tax returns
• Analyze and review financial data for accuracy in reporting to various government agencies
• Generate spreadsheets on excel based on client portfolios in preparation for client meetings

Merrill Lynch Wealth Management **Fairfield, CT**
Wealth Management Intern (10-12 hrs/wk) *September 2011-December 2011*
• Maintained employee database on Merrill Lynch Wealth Management Workstation
• Worked independently on clients' portfolios: updated investment holdings based on present market value
• Generated spreadsheets on excel based on client portfolios in preparation for client meetings

Phonathon – Fairfield University **Fairfield, CT**
Student Caller (6-12 hrs/wk) *September 2010-May 2011*
• Utilized strong interpersonal skills with alumni and prospective donors on a daily basis
• Raised donations for the University General Fund by calling alumni and updated alumni's profiles
• Maintained a high level of donations for the fiscal year

LEADERSHIP EXPERIENCE

Business Plan Competition **Fairfield, CT**
Business Specialist *January 2013-Present*
• Construct business proposal for product, edit business profile, and conduct market research on prospective competitors
• Create and maintain a timeline for meetings, official competition dates and deadlines
• Assist in networking with related businesses, creation of logo design, and development of final product pitch

Orthodox Christian Fellowship (OCF) **Fairfield, CT**
Co-creator and President *September 2010-Present*
• Develop the foundation for building a strong community among Orthodox students
• Collaborate with administrators and peers to establish the club's constitution and earn University club status
• Create a relationship with advisors and administrators to expand the club's network
• Communicate with other students from OCF chapters nationwide

ADDITIONAL INFORMATION

• Computer skills: Microsoft Word, PowerPoint, Excel, Access
• Proficient in French; Studied abroad in Paris, France
• Fairfield University: Calculus I/II tutor, French tutor
• Member of the Fairfield University Finance Club, Investment Club, Math Club, and Rotaract Club
• Accepted as an FMP (Financial Management Program) Intern at GE
• Training for a half-marathon

DIEGO A. MAMANI

111 WILLOWBROOK AVE. STAMFORD, CT 06902
T: 914 482 0689 E: DIEGO.MAMANI@ENERGIZER.COM

SCHICK & PROFESSIONAL HIGHLIGHTS

- Temporarily fulfilled the tasks of an electrical engineer in the Hydro Value Stream Gig-E Upgrade
- Involved with training of the new Electrical Engineer to the Vision Systems on the floor,
- Created a centralized troubleshooting & maintenance webpage for the Electricians to utilize.
- Created a virtual preventive maintenance automated system for the IMS Value Stream. This Generated data from all entries from repairs completed to reduce downtime and increase product.

- Tasked with the responsibilities of an Electrical Engineer with Major Budget Protects for all departments of facility.
- Involved in a new high-speed automation machine that produced the new generation of products.
- Involved replacing a mist collector unit in the Blades Value stream for the Oil Filtration process.
- Created an IEEE Chapter at Fairfield University
- Inventor & co-founder of a new upcoming consumer product (Business Plan Competition at Fairfield University, 1st Round Winner)

ELECTRICAL AND COMPUTER KNOWLEDGE

Experience With:
Microsoft Office Suit, Photoshop, Siemens PLC, Allen Bradley PLC, WinCC, Visionscape Vision Systems, Texas Instruments Bluetooth simulator, Advanced Illumination, Cognex, Solidworks, AutoCad, Multisim, Ultiboard, Labview, and Arduino Microcontrollers.

Programming Languages:
Ladder Logic, Java, C++, HTML, Visual Basic, Flash
Operating Systems:
Windows, Mac OS X, Linux, iOS

WORK EXPERIENCE

Web Administrator (2011-Present)
Royal Rangers - North Eastern Spanish District —Generate new orders for the operation of the website
Robotics Instructor (2011-2012)
Port Chester School District, Port Chester NY - Teach High School students an introductory course using the NXT and Texas Instruments Labview programming language and guide students to an annual regional competition.
Electrical Engineer Intern (January 2012 – Present)
Energizer – (Schick Plant) Milford, CT– Take on primary support in electrical engineering projects, work with other engineers from various talents to develop new manufacturing and automation processes.

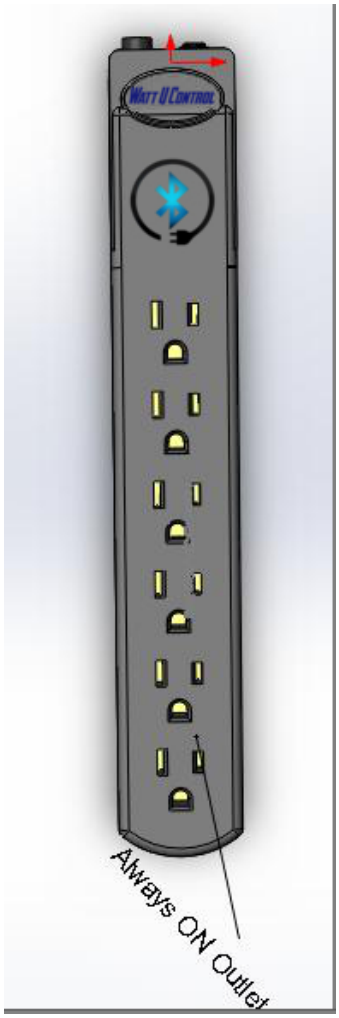
EDUCATION

Fairfield University - Fairfield CT - Electrical Engineer Major, Class of 2014
A/G Bible Institute - Bronx, NY - Class of 2010

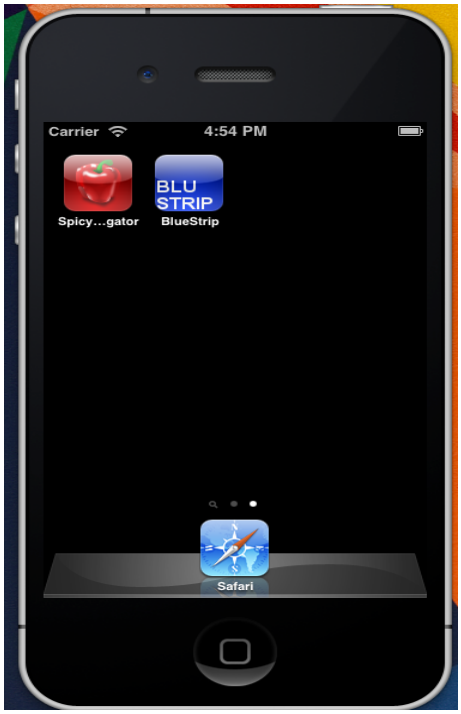
ACTIVITIES & AFFILIATIONS

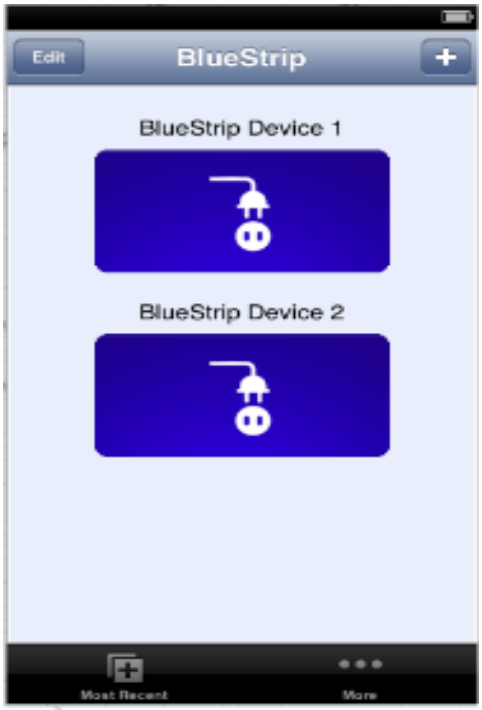
President - ESS - Engineering Student Society (Fairfield University) - 2012-Present Branch Chair –
IEEE Fairfield Branch - Institute for Electrical and Electronic Engineer
Assistant Group Coordinator – Royal Rangers – 2011 – Present

Product Sketch



Application Model



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Laptop
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Outlet
1
2
3
4
Add Profile


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Small Lamp
ON
Display / TV
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Printer
ON
Computer
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