# **Kevin Berman**

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### **EDUCATION**

### GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta, Georgia

August 2011-May 2015

- Candidate for Bachelor of Science in Electrical Engineering with a Minor in Mathematics
- GPA: 3.82

#### EXPERIENCE

# Motorola Solutions, Chicago, Illinois

Summer 2014

# RF Engineering Intern

- Worked on the power amplifier in the next generation repeaters for their mobile radio base stations
- Designed and tested a 7<sup>th</sup> order harmonic filter for the DC power supply in the power amplifier
- Manufactured quality testing on the power amplifier prototypes
  - o Ran the prototypes through a vicious cycle test and x-rayed tested parts to look for solder voids

# Undergraduate Math TA, Atlanta, Georgia

August 2014—Present

### Differential Equations Teacher's Assistant

- Administer and prepare for 2 lectures a week in a class of approximately 30 students
- Responsible for holding weekly office hours and grading students' tests and quizzes

# Opportunity Research Scholars Program, Atlanta, Georgia Undergraduate Researcher

January 2013 – May 2014

- Powering an e-ink display with RF waves via energy harvesting circuitry
  - Designed and tested an adaptive impedance matching energy harvester to increase efficiency at 5.8 GHz
  - Responsible for coding the microcontroller that will power the e-ink display
  - A practical application is to power or charge your cell phone battery while connected to the phone carrier's network
- Measured detuning effects when placing RFID antennas at different frequencies
  - Compared S11 and radiation patterns of antennas near water and at different frequencies
  - Some practical applications are putting the antenna inside football helmets to measure how hard a football player gets hit, which can allow for better detection of concussions.
  - Responsible for designing 2.4 GHz dipole antennas in CST Microwave Studio
- Worked on a team that consists of a faculty advisor, a Ph.D. mentor, and two other undergraduate students
- Created formal proposal and project poster that we used to present in front of Georgia Tech professors

# Tsunami Sound Waves Mobile DJ Service, Houston, Texas

September 2009 - Present

# Co-Founder, DJ

- Co-Founded a DJ business
- Responsible for judging the mood of guests and playing music accordingly

# School of Automotive Machinists, Houston, Texas

January 2011 – February 2011

### Intern

- Hands on experience re-building small block V-8 engines
  - Used various machines to increase horsepower including a honing machine to increase cylinder volume.
  - Used AutoCad to design aluminum block and a CNC machine to create the block out of the aluminum
- Goal was to produce as much horsepower as possible with given engine block

# ACTIVITIES, AWARDS AND LEADERSHIP

### 1<sup>st</sup> Place Poster and Presentation Opportunity Research Scholars

May 2014

• My team won first prize for our adaptive energy harvester at 5.8 GHz

### Radio Club of America Scholar

January 2014

• \$1,000 Scholarship given to outstanding students in Electrical Engineering

# The Class of 1980 Mathematics Award for Pre-calculus

May 2010

• Given to the top student in honors pre-calculus

### SKILLS

Software: MATLAB, C. Flash, HTML, iWeb, Microsoft Office, CST Microwave Studio, IAR workbench, ADS, Cadence, LabVIEW

Communication: Speaking in front of groups of over 50 people; written technical reports

Lab: Logic Analyzer, oscilloscope, multimeter, function generator, power supply, soldering iron, VNA, Spectrum analyzer

Hardware: Building and troubleshooting computers, automobile engine, power amplifiers