# **BRIAN Y. KIM**

1234 Margarita Drive, Fullerton, CA - byk.briankim@gmail.com - (714) 944-9478

<u>Objective:</u> To obtain an internship or research position that allows me to enjoy create and contribute to innovative technologies and science while helping as many people as I can.

#### **Education**

B.S. Computer Engineering/Computer Science

**GPA 3.97** 

University of Southern California - Presidential and Gregory Scholar

May 2016

Troy High School, Fullerton, CA, IB Diploma

**GPA 4.7, SAT: 2380** 

## **Work Experience**

Course Producer / Undergraduate Teaching Assistant

USC Computer Science Department – CS 103

August 2014 – Present

- Mentor and grade USC's Intro to Computer Science students during lab and office hours

# Google Engineering Intern

Contextual Voice Search Team

May 2014 - August 2014

- Worked with Natural Language Processing framework to write custom grammars to trigger specific non-search actions based on user queries
- Designed and implemented a new search result return system for contextual queries with 40% of previous latency (2.5x speed increase).

#### Researcher

University of Southern California – Interaction Lab

September 2013 - Present

- Conducts experiment and designs algorithm to improve behavioral decision making for social robotics
- Extracts data and forms patterns from eye-gaze sensors, voice pitch sensor, and Kinect sensors

# Software Engineer Intern

OneScreen - Tech Startup based in Irvine, CA

Summer 2013

- Designed the architecture for/built the company's developers and API documentation site using Jekyll
- Programmed customized plugins to instantly turn code comments into web documentation
- Experimented with graph databases to apply machine learning algorithms on company data

### Research Assistant

Caltech Nanofabrication/Physics Group, California Institute of Technology

Summer 2011

- Fabricated and designed semiconductor devices and integrated circuits from scratch using photolithography while experimenting in etching optimal gold contact patterns
- Collaborated with professors and graduate students to create a novel, affordable device to perform Polymerase Chain Reaction for faster, more accurate diagnoses for use in lesser

developed regions

- Helped program the smart phone app to control the device

## **Achievements**

CalHacks Top 10 Hack, Most Fun Hack, and Major League Hacking Best Myo Hack Winner for dual Myo armband augmented, real life Street Fighter

Google LA Video Hackathon 2013: Best Overall App/Wow Factor Winner, Team Captain and Founder (TVUS)

Presidential Award for Community Service

PennApps Jawbone Jambox Challenge Winner

#### **Skills**

Technology Skills: C++, Java, Ruby (Rails/Jekyll), Product Design/Management, Android, NodeJS, HTML/CSS, JavaScript, ROS, Jquery, Amazon AWS (S3/EC2), Raspberry Pi, Arduino, Python, Neo4j, Matlab, Ubuntu User, Machine Learning

Mile time: 5:15

Relevant Coursework: A.I., Data Structures, Algorithms, Computer Organization and Embedded Systems, Graduate Linear Algebra, Technical Entrepreneurship

## **Current Organizations**

USC Hack Nights

Community Leader

ACM-Intercollegiate Programming Competition

USC Team Representative

USC Association of Computing Machinery (ACM)

Executive Board, Corporate Affairs Officer

#### **Leadership**

<u>HackSC</u> Large-scale West Coast Hackathon - www.hacksc.com March/November 2014 Founder/Head Organizer

- Planned and executed overall vision for increased diversity, open collaboration, and mentorship for newer hackers
- Headed logistics management that worked with the University
- Helped secure over \$40,000 total in fundraising from sponsors

FIRST Robotics March 2010 – June 2012

Founder/President/Captain of Troy High School FIRST Robotics Competition Team 3952 Captain/Programming Head of FIRST Tech Challenge Team 542 at Whitney High School

- Won World Championship Judge's Award and multiple regional championships.