# **Chiyoung Kim**

#### Education

#### Harvard College

S.B. in Electrical Engineering

Expected Graduation: May 2017

## Professional Experience

## Microsoft - Enterprise/Telemetry & Diagnostics

May 2016 – Aug. 2016

Intern – Program Manager, Designer, Developer

Redmond, WA

Collaborated with Enterprise and Privacy representatives to create an official Microsoft transparency tool targeting enterprise privacy concerns to demonstrate Windows 10 telemetry safety. Created specifications, designed UI/UX, and developed features.

## Nichrome Icicle Cutter – Startup

Sept. 2015 – May 2016

Co-Founder, Engineering, Product Management

Cambridge, MA

Created an icicle cutting device for Harvard Facilities Maintenance Operations with team and acquired provisional patent. Project accepted into the Harvard Innovation Lab's Venture Incubation Program. Project featured in international news and television.

### Harvard College, Extavour Lab – Product Design – Agabros Researcher, Product Designer

Sept. 2014 - March 2015

Cambridge, MA

Worked with members of the Extavour lab to design a tool for simultaneous analysis and imaging of multiple specimens. Designed product from specimen data and user feedback, fabricated several prototypes and a final product.

## Massachusetts Eye and Ear Infirmary - Experimental Cochlear Implants

July 2014 – Aug. 2014

Researcher/Consultant, PI: David Landsberger (NYU), Konstantina Stankovic (MEEI)

Cambridge, MA

Created a research tool in MATLAB that sends custom stimuli to cochlear implants. Will be used in development of a fully implantable device. Collaborated with Massachusetts Eye and Ear Infirmary and New York University.

#### House Research Institute - Cochlear Implants

July 2013 – Aug. 2013

Research Assistant, PI: David Landsberger

Los Angeles, CA

Modeled possible effects of cochlear stimulation from cochlear implants. Participated as subject in ear studies. Assisted in analyzing data on hair cells of the ear. Created models using MATLAB. Presented findings.

#### NASA Jet Propulsion Laboratory - Mission Quality Assurance

July 2012 – Aug. 2012

Researcher, PI: Henry Garrett

Pasadena, CA

Created a model of magnetic radiation around Uranus. Used model to check previously made model and found errors in said previous model. Modeled in Mathematica, used various tools to facilitate data collection.

#### **Technical Projects**

### Holo In One - HoloLens, Augmented Reality, Bluetooth, IMU, Unity

June 2016 – July 2016

During Microsoft internship, managed a small team leading up to and during the \\oneweek hackathon to create a project under NDA for the HoloLens. Did coding work with the team in addition to managing it.

## 16-Bit Processor - VHDL, Circuit CAD, Simulation, Design

March 2016 - May 2016

Created a 16-bit processor in which the datapath and register were made in Cadence and control unit was synthesized using Verilog. The processor was co-simulated and provided 6 possible assembly-level instructions.

#### Turf Wars - Rapid Fabrication, Modeling

March 2015 – May 2015

Led winning team in a botball-style event where teams of 3-4 designed and built robots using 3D modeling, laser cutting, 3D printing, molding, casting, and other mechanical fabrication methods.

#### Acoustic Triangulator - Signal Processing, Hardware Interfacing

March 2014 - May 2014

Created a system in MATLAB that took microphone inputs to triangulate the locations of sound sources.

## Technical Skills and Interests

Languages and Tools: MATLAB, Mathematica, Python, C, Visual Basic, HTML, DataThief, Zeiss Blue, ImageJ

**3D Modeling and Rapid Prototyping:** AutoCAD, SolidWorks

Interests: Dance, Music, Music Production