

Jiwook Kim

Seoul, Korea

010-7512-6211 | jiwook021@gmail.com | LinkedIn | Github

My Personal Website: Jkimengineer.com

EDUCATION

Northeastern University

BS IN COMPUTER ENGINEERING TECHNOLOGY

Jan 2018 - Aug 2021

GPA: 3.8 / 4.0

Stony Brook School

HIGH SCHOOL DIPLOMA

May 2014 - June 2017

SKILLS

Programming Languages

- C++ • C • Python • JAVA • JavaScript
- Matlab

Front End Designs

- HTML • LaTeX • CSS

HARDWARE

- Digital/Analog Circuit Design • Computer Networks
- Lab Equipment • Physics
- Embedded Systems: Arduino, STM32, Raspberry Pi

Programming language

- C, C++, BASH, Python, MATLAB, JavaScript, JAVA, C#.

Mathematics:

- Linear Algebra • Multivariable Calculus • ODE, PDE
- Discrete Mathematics

Applied Mathematics:

- Signals and Systems • Data Structure and Algorithm
- Probability and Statistics • Computer Vision
- Machine Learning

Mathworks - Matlab

Matlab Fundamentals

MATLAB for Data Processing and Visualization

Image Processing Onramp

Deep learning Onramp

Introduction to Statistical Methods with MATLAB

Solving Nonlinear Equations with MATLAB

Solving Ordinary differential equation with MATLAB

Introduction to Linear Algebra with MATLAB

Introduction to Symbolic Math

Top 30% LinkedIn skill test

Linux BASH

Object-Oriented Programming, Agile Methodologies

C, C#, PYTHON

HTML, CSS, JAVA Scripts

MATLAB

Microsoft Excel

Programming Hub

Assembly 8086

IPv4 Networking, Computer Networks

Machine Learning

Shell Scripts, IOT

C++ Advanced, C Advanced

EXPERIENCE

Co-op Hardware -Electrical Engineer Bose

Jan 2019-July 2019 | Boston, MA

- Wrote firmware(C++) and designed the electric circuit for an audio-based IOT device that could play music and perform LED interactions through cooperating with capacitor and proximity sensors, rotary encoders, buttons, and potential-meters. Designed algorithm-intensive real-time-based software for the device's prototype, allowing the company to experience the realized product and conduct user testing
- Performed thermo-testing for lithium-ion battery, and battery characteristic analysis for the silver-zinc battery. Created various testing equipment via microcontrollers.

Engineering Lead STONY BROOK HIGH SCHOOL

November 2015 - April 2017 | Stony Brook, NY

- Led robotics team as the head engineer, both providing the model for the robot and building the final machine to complete in tech challenge competitions. Utilized AutoCAD for 3D printing. Coded the robot's control system using Java on Tetrix/REV software.

Teaching Assistant

November 2016 - May 2017 | Stony Brook, NY

- Assisted students in understanding fundamental principles of Physics through interconnecting ideas from both Physics and Calculus using visual representations and proofs.
- Assisted in conducting lab sessions and helped students to solve Physics problems within the classroom.

RESEARCH

Research Assistant SILICON SYNAPSE LAB

Feb 2020 - April | Boston, MA

- Developed firmware system for a bat robot via a STM32 Micro-controller using C/C++.
- Assisted in designing electric circuits and debugged hardware defects,

AWARDS

Physics Highest Honors

MAY 2016

- Highest grade in AP physics class out of sixty students.

Regional Finalist in First Tech Challenge

JAN 2017

- Achieved finalist position in FTC(First Tech Challenge) New York State regional competition.
- Created a robot that could collect balls on the ground and shoot them into a basket.

High School Mathematical Competition in Modeling: Finalist

JAN 2016

[Link for the Award](#)

- Used 3D mathematical modeling to analyze millions of data points employing probability, statistics, and Matlab to produce a safety rating for each Chicago city district.

AP Scholar with Distinction

JUNE 2016

Head of School Honor Roll

DECEMBER 2017