Jae Young Lee

Software Engineer

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EDUCATION

University of Pennsylvania
Master of Computer Science (MCIT)
Expected May 2023

Johns Hopkins University
BA & MA in Chemistry
Aug 2014 - May 2018

published paper :
"A BN Aromatic Ring Strategy for Tunable Hydroxyl Content in Polystyrene," Angew. Chem., 2017.
"Free Radical Polymerization of Green Azaborine Vinyl Monomer," Chem. Commun., 2017.
"Innocent BN bond substitution in anthracene derivatives," Org. Biomol. Chem., 2016

COURSEWORK

Intro to Computer Systems
Intro to Software Development
Intermediate Programming
Computational Chemistry
Programming for Material Eng.
Linear Algebra

SKILLS

Mathematical Aptitude
Communication
Research

LANGUAGE

Java
C
Python
JavaScript

AWARDS

Provost's Research Award(PURA)
BA, JHU @ Baltimore | 2015

US Army Certificate of Achievement
Sergent, KATUSA @ Camp Humphrey, Korea | 2019

Chung In Wook Scholarship
Chung In Wook Foundation @ Seoul | 2015 - 2018

PROJECT

Spell Checker | Lead Developer
Nov 2021 | Philadelphia, PA

- Developed a Java spell checker that corrects an input file according to a dictionary
- Allowed users to replace misspelled words from a suggested word list or manually correct
- Implemented object oriented programming and JUnit tests to debug and keep the code DRY

IBM Hackathon | App Developer
May 2020 – Jun 2020 | Seoul, South Korea

- Created solutions for COVID-19 as a project designer and front-end coder in IBM 2020 Call for Code Korea Hackathon
- Used React Native and IBM Cloud to build a cross platform app that individuals can easily donate and supply necessities to an organization
- Implemented user centered design to help users to quickly learn how to use the app

Molecular Simulation of Polymer | Lead Devloper
Apr 2016 – May 2016 | Baltimore, MD

- Planned and designed a statistical analysis to simulate molecular dynamic movement of free-radical polymers.
- Set up the user interface to display polymer movements and allow users to customize the simulation.
- Implemented Monte Carlos Simulation to analyze the polymer kinetics.

Background

42 Seoul School | Cadet (Student)
Mar 2021 – Aug 2021 | Seoul, South Korea

- Built C programs to solve problems and collaborated with others to share the logic behind individuals' codes.
- Lead team projects including converting number into written english and deriving possible positions on a board with recursive functions
- Learned strong leadership, interpersonal and communication skills by spending significant amount of time as a group.

Klausen Chemistry Lab | Researcher
May 2015 – May 2018 | Baltimore, MD

- Conducted research regularly and studied about polymer and azaborine chemistry.
- Performed various laboratory techniques including air-free synthesis, purification and characterization