

## EDUCATION

### University of Pennsylvania School of Engineering & Applied Science

*Expected May 2021*

*Bachelor of Applied Science in Computer Science*

*Philadelphia, PA*

- **Cumulative GPA: 3.96 / 4.0**

- Honors: University Dean's List 2017 – 18, 2018 – 19 | Eta Kappa Nu Electrical and Computer Engineering Honor Society
- Coursework: Algorithms and Data Structures | Big Data Analysis | Linear Algebra | Mathematical Foundations of CS | JavaScript | Python | Computer Systems (C programming) | Software Design & Engineering (Android) |

### Hankuk Academy of Foreign Studies

*Feb 2014 – Feb 2016*

- GPA: 4.0/4.0

*South Korea*

## EXPERIENCE

### University of Pennsylvania, Department of Computer and Information Science

*May 2019 – July 2019*

*Research Assistant*

*Philadelphia, PA*

- Contributed in building the data set for the Deep Neural Network that predicts possible fixes for bugs
  - Used Babel and PyGithub to collect ~2M buggy and fixed version of JavaScript codes from GitHub and generate the abstract syntax trees
  - Analyzed the abstract syntax tree differences between bugs and their fixes to label the common types of fixes
  - Implemented Python and shell scripts to parallelize the data collection and processing, improving the speed by 45%

### UPenn Google CSR Explore Program – PolyDroid Project

*Dec 2018 – April 2019*

*Research Assistant*

*Philadelphia, PA*

- Participated in the development of PolyDroid, a Machine Learning based tool that generates an optimized version of an input Android app with minimized resource consumption while maintaining usability
- Developed a Java program that analyzes the target view and its adjacent XML elements, automating the feature collection

### Ranee & Company

*July 2018 – August 2018*

*Marketing / Design Consulting Intern*

*Seoul, South Korea*

- Provided consultation services for a \$48 M building renovation project, resulting in an additional project with the client
- Constructed a 50-page market and design research report on different shared office businesses and retail spaces supporting the team in creating further deliverables for the client

## PROJECTS

### Anabada

*Feb 2019 – May 2019*

- Collaborated with four programmers in the development of an Android app and a website that serve as a platform for a user to exchange unused or unnecessary items with other users
- Used Java, JavaScript, HTML, CSS, Node Express, MongoDB and Google Map API

### Fabrec (github.com/kimny817/NETS213-Fabrec)

*Feb 2019 – May 2019*

- Spearheaded a crowdsourcing based fashion recommendations service with a team of four
- Designed a three-step process that crowdsources from Amazon Mechanical Turk for data aggregation and quality control
- Deployed Python and Pandas to generate input data for crowdsourcing tasks and to analyze the performance of the service

### Roomies (github.com/losina/cis197\_Roomies)

*Oct 2018 – Dec 2018*

- Developed a roommate management platform with roommate search, group page and task management functionalities
- Utilized JavaScript, MongoDB, Node Express, HTML, CSS and Google Map API

## EXTRACURRICULAR ACTIVITIES

### K-Pensa

*Sept 2017 – Present*

*Designer of Korea-Penn Engineers & Scientists Association*

*Philadelphia, PA*

### TEDx Organizing Team

*Mar 2013 – Aug 2017*

*Designer and Member of Event Management Team*

*Seoul, South Korea*

## SKILLS

**Programming Skills:** Java, JavaScript, Python, HTML/CSS, Linux, Android, Pandas, MongoDB, jQuery, Node.js, Express.js

**Design Software:** Photoshop, Illustrator, InDesign, SolidWorks

**Languages:** Korean

**Personal Interest / Hobby:** Graphic Design, Gouache Paintings, Analog Photography