

# Heejoo Jin

+82 10-5610-1754 | [hjin77@gatech.edu](mailto:hjin77@gatech.edu) | [heejoojin.com](http://heejoojin.com)

## EDUCATION

**Georgia Institute of Technology**, Atlanta, Georgia, USA

**August 2017 – Present**

**Bachelor of Science in Computer Science**

Expected Graduation: Fall 2021

• Concentration: People & Intelligence

GPA: 3.73/4.0 | Dean's List

• Courses: Object-Oriented Programming, Data Structure & Algorithms, Artificial Intelligence, Machine Learning

Human Computer Interaction, Data Visualization, Analysis of Algorithms

**Nanyang Technological University**, Singapore, Singapore

**January 2020 – May 2020**

**Computer Science Exchange Program**

## EXPERIENCE

**Samsung Electronics**, Suwon, South Korea

**June 2020 – August 2020**

**Wireless Connectivity Software Engineering Intern – Convergence Development Group**

- Designed a Bluetooth Low Energy (BLE) connectivity solution for Galaxy Buds that allows automatic switching to the active audio source between multiple Galaxy mobile devices.
- Developed an Android application that measures the success of the Proof of Concept, using Java and Android BLE API.

**Exoskeleton and Prosthetic Intelligent Controls Lab**, Georgia Institute of Technology

**May 2019 – December 2019**

**Machine Learning Undergraduate Researcher**

- Developed a NN ML model in Python using Keras that estimates gait phase and walking speed in real-time in order to robustly provide corresponding assistance in a powered hip exoskeleton during movement.
- Conducted a comparative study on ML classification algorithms to evaluate their performances on predicting user intents on various locomotive modes as well as to monitor different data preparation techniques.
- Utilized biomechanical measurements such as IMU & EMG sensors and VICON to understand user's gait dynamics.

**Warner Bros. Entertainment**, Atlanta, Georgia, USA

**January 2019 – May 2019**

**Games Quality Assurance Intern – Cartoon Network Digital**

- Debugged and optimized the performance of mobile games, apps, and console games that reached 1,000,000+ users.
- Performed testing and documented defects in a clear and concise manner on Jira bug tracking database.
- Managed in-person user research with children aged 8-12 to understand their user experiences with CN Arcade app.
- Used Jira REST API, Javascript, and JQuery to build a web page that efficiently collects and organizes data from Jira.

**Augmented Environment Lab**, Georgia Institute of Technology

**August 2018 – December 2018**

**AR Undergraduate Researcher**

- Built an AR experience that allows users to configure theatrical scenography and enhance devised theatre process by virtually placing different properties onto a performing stage, using C#, Unity3D, and Ricoh 360° camera.
- Designed socially engaged AR storytelling for theatre performance, "The Safety Show" in collaboration with DramaTech.
- Conducted user research on Viewpoints and Rasaboxes, techniques of performance art for creating movements.

## PROJECTS

**Breaking the curse of using small datasets and Improving performance of ConvNets** | [heejoojin.com/DL/CNN.html](http://heejoojin.com/DL/CNN.html)

**Deep Learning Project**

- Tackled the issues of using small datasets in Deep Learning (DL) development such as overfitting & generalization error.
- Implemented data augmentation, dropout, transfer learning, feature extraction, fine tuning to optimize the DL model.

**Classification of Cardiovascular Disease** | [github.com/heejoojin/Classification-of-Cardiovascular-Disease](https://github.com/heejoojin/Classification-of-Cardiovascular-Disease)

**Machine Learning Project**

- Explored 4 different supervised ML algorithms for heart disease classification to compare their accuracies.
- Used various data preprocessing techniques to optimize its performance using Python, Scikit-learn, and Keras.

**Space Trader** | [github.com/heejoojin/SpaceTrader2340](https://github.com/heejoojin/SpaceTrader2340)

**Android Application Project**

- Developed an Android application that reintroduces a classic open-source Palm Pilot game called Space Trader.
- Led a team of 4 members and worked in all phases of the project, including conceptualizing our own version of the game, programming in Java, writing unit tests, and creating interactive user interface design.
- Integrated Google Firebase that saves user's in-game items & currency to allow correct purchases and sales of items.

## LEADERSHIP

**Korean American Scientists and Engineers Association (KSEA)**, Georgia Institute of Technology

**President**

**January 2018 – Present**

- Directed various professional development & networking events for Korean-American students at Georgia Tech.
- Oversaw and coordinated fundraising events that have raised \$1000+ and secured lasting relationships with sponsors.

## SKILLS

**Programming Languages:** Java, Python, HTML, CSS, PostgreSQL

**Tools:** Keras, Pandas, Android Studio, Adobe Photoshop, Microsoft Office

**Languages:** English – Fluent, Korean – Fluent

**Interests:** Painting, Travel, Thriller Movies, Documentaries