Heejoo Jin

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EDUCATION

Georgia Institute of Technology, Atlanta, Georgia | August 2017 - December 2021
Bachelor of Science in Computer Science | GPA: 3.76 / 4.0

SKILLS

Java, Python, SQL
HTML, CSS, JavaScript
PyTorch, Keras, OpenCV, Scikit-learn, Pandas

PROFESSIONAL EXPERIENCE

DEEPNOID, Seoul, South Korea   October 2020 - December 2020
Deep Learning Research Intern
· Worked with National Cancer Center on developing a breast cancer histology image classification model with an accuracy of 99%.
· Optimized a U-Net model for multi-class semantic segmentation of bone cyst MR images, reducing the loss by 3%.
· Managed model deployments via REST API using Kafka & Flask and visualized localizations of detected diagnostic areas.

Samsung Electronics, Suwon, South Korea   June 2020 - August 2020
Software Engineer Intern
· Designed a Bluetooth Low Energy (BLE) connectivity solution that covers edge cases of Galaxy Buds Automatic Sound Switching.
· Developed a Proof of Concept Android application for BLE connectivity with Galaxy Buds using Java & Android BLE API.

WarnerMedia, Atlanta, Georgia   January 2019 - May 2019
Quality Assurance Analyst Intern
· Debugged and tested mobile games and apps that reached 1,000,000+ users and documented defects in a concise manner on Jira.
· Completed user research with children aged 8-12 to identify the user's needs to improve Cartoon Network Arcade app.

RESEARCH EXPERIENCE

Exoskeleton and Prosthetic Intelligent Controls (EPIC) Lab, Georgia Tech   May 2019 - Present
Machine Learning Undergraduate Researcher
· Build various machine learning models for user gait variable estimation to optimize health monitoring and exoskeleton assistance control.
· Utilize Vicon motion capture system and biomechanical sensors to understand human-robot interaction.

Augmented Environment Lab, Georgia Tech   August 2018 - December 2018
Augmented Reality Undergraduate Researcher
· Contributed to the idea creation and Unity development of a mixed reality theatre performance in collaboration with DramaTech Theatre where AR was used to convey and visualize the emotions of the scene.

PROJECTS

Cardiovascular Disease Classification | Machine Learning
· Compared statistical values of supervised & unsupervised machine learning algorithms to analyze their performances using Scikit-Learn.

Real-time Face Recognition | Computer Vision + Internet of Things
· Built a real-time customized face recognition system on Raspberry Pi using OpenCV for user identification.

Muny Pottery Studio | Web Application
· Developed an e-commerce web application to market a local pottery studio using Heroku & Node.js.
· Integrated Paypal Checkout for the payment gateway and Google Firebase for authentication and real-time data management.

Space Trader | Android Application
· Created an Android application using Java that reintroduces a classic strategy game, Space Trader, utilizing Scrum development process.
· Worked in all phases of the project, including conceptualizing our own version of the game, creating interactive user interface, and testing.

PUBLICATION & PRESENTATION

· H. Jin, I. Kang, G. Choi, D. Molinaro, A. Young, Wearable Sensor-Based Step Length Estimation During Overground Locomotion Using a Deep Convolutional Neural Network, *IEEE Engineering in Medicine and Biology Society (EMBC)*, May 2021.

· H. Jin, M. Shepherd, D. Molinaro, I. Kang, A. Young, Convolutional Neural Network-based Gait Phase Estimation and Classification Using a Robotic Ankle Exoskeleton, *Georgia Tech Annual Undergraduate Research Symposium*, April 2021.

LEADERSHIP

Korean American Scientists and Engineer Association (KSEA), Georgia Tech   May 2020 - May 2021
President
· Empowered Korean-American students at Georgia Tech by providing opportunities to engage in career development and networking.