Yihua Pu

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Education

Carnegie Mellon University
Master of Science in Electrical and Computer Engineering (ECE)   May 2022
– Coursework: Foundations of Computer Systems, Machine Learning in Production

University of Illinois at Chicago (UIC)
One-year Exchange Program at ECE Department   May 2019
– GPA: 4.00 / 4.00
– Coursework: Operating System Design & Implementation, Computer Organization, Software Design, Programming Language Design, Pattern Recognition

East China University of Science and Technology (ECUST)
Bachelor of Engineering in Electrical Engineering   July 2019
– Ranking: 1 / 61;   Overall GPA: 3.84 / 4.00;   Major GPA: 3.95 / 4.00
– Coursework: C, Python, Discrete Math, Data Structure & Algorithms, Software Engineering, Database, Artificial Intelligence, Optimization Methods, Embedded System

Work Experience

Apple
Software Engineering Intern   Mar. 2020 - Sept. 2020
– Worked on an initiative to centralize and optimize the palletization process.
– Developed an iPad App using **Swift** that integrated with SAP Cloud and on-premise SAP system.
– Built a game that gamifies the palletization process for learning and training using **Unity** and **C#**.
– Worked with a matrix team distributed across locations (Shanghai, Singapore, US); presented to senior executives.

eBay
Software Engineering Intern   Oct. 2019 - Mar. 2020
– Participated in agile development and contributed 20+ new features to the Financial Accounting System that processes all the transactions of eBay.
– Created **RESTful APIs** with **Java Spring** and web pages with **React**; managed projects with **Maven**.
– Built a set of **Python** scripts to automate repetitive tasks, such as journal validation and data fixing.

Renlifang Intelligent Tech
Software Engineering Intern   July 2018 - Aug. 2018
– Worked on data collection for a stock analysis system that estimates the risk of trading strategies.
– Designed and implemented a pipeline to crawl, clean, format, and store about 43 million stock records using **Python Scrapy** and **MySQL**.

Projects

Electroencephalography (EEG) Classification using Deep Learning
Research Assistant
– Implemented a Convolutional Neural Network (**CNN**) to classify EEG signals and predict which character was stared at by disabled subjects.
– Trained this network using **Python Keras** and achieved 91% test accuracy on the BCI Competition III dataset, which outperformed tradition LDA methods by 8%.

Operating System Core Functions Implementation
UIC CS461 Project
– Built OS functions in XV6 (a Unix-like x86 OS) using C and X86 Assembly, debugged with GDB.
– Implemented Functions: bootloader, console driver, graphics driver, memory and page management, '/proc' virtual file.

Skills

Programming: C, C++, C#, C#+, JavaScript, JavaPaper, JavaTissue, Matlab, Python, Snake
Framework / Library: Spring Boot, JUnit, React, Express, Django, Scrapy, Keras, NumPy, Unity
DevOps: Maven, Git, Docker, Kubernetes, Jenkins, AWS