ELLIS TRAN

Contact

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Pittsburgh, Pennsylvania
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EllisTran

Education

University of Pittsburgh — Jan. 2022 to Current
MS Bioengineering, Neural Engineering
Expected Graduation: May 2023
Concentrations in Brain Computing Interfaces and Neural Tissue Interfaces
Currently Enrolled in: Microfab Neural Interface Devices, Flexible Electronics, Stat Learning & Data Science

Carnegie Mellon University — Jan. 2022
As a University of Pittsburgh student, I will be taking Statistical Models of the Brain through the PCHE program at Carnegie Mellon University

University of Arkansas — Aug. 2017 to Dec. 2021
BS Computer Science 2021
GPA: 3.33
Relevant Coursework: Computer Graphics, Linear Algebra, Operating Systems, Engineering Statistics, Data Structures, Software Engineering, Database Management Systems

Yonsei University — Aug. 2020 to June 2021
BS Computer Science
Studied abroad at Yonsei University
Relevant Coursework: Algorithms, Computer Vision

Skills

PROGRAMMING LANGUAGES & FRAMEWORKS
Swift (iOS)
Python
Javascript/Typescript
C++
Flutter/Dart
Java
Angular
React Native
Redux
R

DATABASE MANAGEMENT SYSTEMS
SQL
PL/SQL
Firebase/Firestore

OTHERS
Cell Cultivation
Animal Dissection
Git
UNIX
Agile Development

LANGUAGES
English
Vietnamese
Korean

Research & Projects

Biomedical Engineering Research Assistant — July 2021 to Dec. 2021
- Assisted **Dr. Jeffrey Wolchok** in the **Biomedical Engineering** department and several graduate and undergraduate researchers to measure how extracellular vesicles affect **muscle tissue regeneration**
- Dissected multiple rats' hind limb and extracted bone marrow cells to observe stem cell growth
- Cultivated and observed **cell growth**, as well as gained real-life lab experience

Biological Image Processing Research Assistant — Jan. 2019 to May 2019
- Assisted **Dr. John Gauch** and **Dr. Fiona Goggins** at the **University of Arkansas** in the creation of detection software using various **computer vision** algorithms such as edge tracing, Gaussian filtering, and image inversion to locate and count different types of **stromules** in microscopic images of plant cells
- Evaluated and utilized Dr. John Gauch's image analysis library in **C++** to determine which techniques would be best to discover and measure the length and shape of stromules

VacCheck — Jan. 2021 to Dec. 2021
- Led a team of **five** computer science seniors for a senior design project to allow users with **COVID-19 vaccinations** to enter businesses and events via a generated **QR code** to allow for a safe transition from the pandemic
- Developed the project in **React** for web, **Flutter** for cross-platform mobile, and **Firebase** for the database
- Designed **data flow** and **architecture** between health professionals, businesses, and users
- Divided tasks up among the team members to efficiently complete the application

IDeal — Dec. 2017 to May 2019
- Lead a team in the innovation of a student ID application at the University of Arkansas
- Developed an iPhone and Android application in **Swift** and **Java** to provide university IDs on smartphones for students and faculty
- Generates **barcode** and **QR code** unique to each student based on their student ID
- Wrote a TCP server in **Python** to read and write JSON files that acquires specific data types to be sent to the mobile application

Employment

J.B. Hunt Transport Services, Inc — Lowell, Arkansas
Application Development Intern — Oct. 2018 to May 2019, Sept. 2021 to Dec. 2021
- Used **Angular** to make bug fixes as well as to develop efficient features for the **Platform** application
- Created a J.B. Hunt Hackathon mobile application using **React Native** and **Redux**
- Utilized Google's **Firestore** service to act as a database for all of the teams' data
- Created and debugged an algorithm to determine the ranking of the teams
- Created 70+ dynamic email templates using the HTML framework, **MJML**

Asimula — Seoul, South Korea
Software Engineering Intern — Jan. 2021 to July 2021
- Developed Igloo, a new mobile application built in **Flutter** for users to meet new people in a group setting
- Assisted in creating the backend and database utilizing **Firebase** and **Firestore Functions**
- Architected the main messaging and matching feature along with the notification backend
- Implemented multiple build environments for development, staging, and release to avoid developing on release data
- Successfully released an Alpha and Beta version of Igloo

L3Harris Technologies — Greenville, Texas
Software Engineering Co - Op — Aug. 2019 to Feb. 2020
- Assisted in managing **databases** to convert it to a newer and more efficient architecture using **SQL** and **PL/SQL**
- Implemented metadata, procedures, and views to assist in the backup and restore processes of previous architectures into the current architecture
- Created numerous automated tests and scripts using **Python**, **Fabric**, and **Bash** to ensure that previously created processes are verified and cooperating with new features
- Helped integrate automated testing into the Jenkins pipelines
- Assisted and taught teammates unfamiliar with **Git** to have a comprehensive understanding of version control using the rebase method

Paycom — Oklahoma City, Oklahoma
Software Development Intern — May 2019 to Aug. 2019
- Created and optimized features to the mobile Paycom application in **Swift**
- Implemented **machine learning** techniques using user statistics to create new functions for users to utilize
- Enacted a new centralized logging system using **Realm Swift** to log various types of objects and data
- Conducted meetings with **Product Management** to further implement these features into production
- Presented the project to the **CEO** and **CIO** of Paycom

University of Arkansas College of Engineering — Fayetteville, Arkansas
Peer Mentor — Apr. 2018 to May 2019
- Assisted 10 first year engineering students ease the transition from high school to college
- Met weekly with students to answer questions about academics and extracurricular activities

Awards

The Walton Family Foundation Board · **Arkansas Companies Engineering Intern Program for Technology Scholarship** — Sept. 2021
Two time recipient of a **$1500 scholarship** awarded to students who intern for an engineering company based in Arkansas

University of Arkansas College of Engineering · **Porter Stone Scholarship Award** — Apr. 2021
$1000 scholarship is awarded to students who have completed three or more internships/coops while being a student in the College of Engineering at the University of Arkansas

University of Arkansas College of Engineering · **Engineering Symposium Best Presentation** — Apr. 2018
Won "**Best Presentation**" for iDeal at the 2017-2018 Honors Innovation Section of the Engineering Symposium