

Ethan Tran

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Education

B.S. in Computer Engineering; University of California, Los Angeles

GPA: 3.8

-Expected Graduation: December 2019

Relevant Coursework: Object-Oriented programming, Algorithms and Data Structures, Intro to Machine Learning, Computer Networks, Signals and Systems, Digital Signal Processing, Operating Systems, Database systems

Experience

Aerospace Corporation - Software Engineer Intern

June 2019 - Present

- Developed a universal data platform designed to facilitate data access and retrieval for data scientists and engineers across different programs
 - Presented prototype and trade study to upper management in order to get 2700 engineer hours of funding approved
 - Designed web interface and controller logic enabling rapid queries (Python, Flask)
- Designed database used to store the metadata associated with the telemetry data sources of interest (SQL)
 - Developed tooling suite to automatically identify and tag data sources
- Initiated company-wide python server enabling analysts to use external machine learning and statistical models in Tableau

Rockwell Collins Advanced Datalinks - Software Engineer Co-op

January 2018 - August 2018

- Wrote productionized code for the common embedded software platform hosting datalink applications (C++)
- Developed Python libraries and developed a tooling suite to enable testing on remote raspberry pis
 - Developed the web interface to facilitate engineer testing and visualization experience (Javascript, HTML)
- Expanded the error reporting system as part of improvements to continuous integration (C++, Python)
- Redesigned API to use batched calls between the UNIX operating environment and application layers (C++)

AIAA Unmanned Aerial Systems at UCLA - Software Developer

September 2017 - December 2017

- Architected and led team to develop data pipeline needed to classify objects in real time (Keras, Tensorflow and OpenCV)
 - Manage machine learning worker nodes and implemented message queueing service using ZeroMQ
- Configured computer vision automation framework using Jenkins and Docker container deployment on Amazon Cloud EC2
- Developed a node.js server to enable real time interaction and visualization of the data obtained from the flying drone
 - Developed RESTful APIs to service web developers

UCLA NIH Big Data to Knowledge - Software Developer Intern

February 2017 - September 2017

- Developed BioComposer a web application built with HTML, Javascript, JQuery, Node.js, Express, and MongoDB
 - Integrated medical database APIs to easily search and cite references for medical Wiki pages
 - Implemented a login system with personal file manager and citation bookmarks manager

Projects

Renal Lesion Classifier

- Developed software using Convolutional Neural Network to process kidney scans and accurately (above 95%) classify the condition which is otherwise difficult without an invasive procedure (Python, Tensorflow)

Campus Market

- Built a full stack e-commerce platform using Javascript and AWS for users to buy and sell items on an interactive map
 - Created search and filtering algorithm to improve user experience
- Designed backend server Integrating Amazon DynamoDB to store user data and listed items

Skills

Programming Languages: Experienced: C++, C, Python, SQL; Proficient: Java, Javascript, Bash Scripting

Software: Linux/Unix, MySQL, PostgreSQL, Git, Agile, OpenCV, Keras, Tensorflow, Docker, Amazon Web Services, GDB, Django, Node.js, Tableau, Jupyter Notebook, Google Cloud Platform, Elasticsearch, MATLAB

Activities

MentorSeas Mentor

September 2017 - Present

- Mentored first year and transfer computer engineering students

UCLA Learning Center Consultant

September 2017 - December 2017

- Managed technological resources available to students and led workshops teaching students various computer skills

HKN Honor Society Tutoring Chair

September 2016 - Present

- Provide tutoring help in core electrical and computer engineering courses (e.g. data structures, computer systems)