

An Phan

SOFTWARE ENGINEER

✉ anphanmail@gmail.com | 🏠 anxphan.github.io | 🌐 anxphan

Education

Brown University

Providence, Rhode Island

B.S. IN COMPUTER SCIENCE AND APPLIED MATHEMATICS (GPA: 3.7)

August 2015 - May 2019

- NCAA Division I Varsity Women's Track and Field
- 2019 Rewriting the Code Fellowship, Singh Family Undergraduate Teaching Assistant Award

Work Experience

Cisco

San Jose, California

SOFTWARE ENGINEER

August 2019 - Present

- Overhauled internal search to directly answer inputted questions using Natural Language Processing (NLP) models and the Stanford Question Answering Dataset (SQuAD) without needing to open search result links.
- Optimized internal search results by dividing over 550,000 documents into tree-structured, header-based chunks that improved search result accuracy by pointing users directly to relevant passages.
- Created a multiprocessing script to build title-to-subheader lists via an inorder traversal of the tree-structured chunks and cached them in MongoDB. These lists are used for chunk tagging, allowing easier chunk retrieval in search.
- Migrated foundation services from Flask to FastAPI, improving latency and throughput by over 300% in staging and production.
- Produced containerized services, deployed via Docker images, to provide endpoints that include metadata from technology pages, which are used in migration from on-prem servers to cloud.

Defense Advanced Research Projects Agency (DARPA)

Providence, Rhode Island

RESEARCH ASSISTANT (BIT.LY/NRTHSTAR)

October 2018 - May 2019

- Part of a team of Brown and MIT computer scientists that won \$3.1 million in grants from DARPA.
- Added a capability to the Northstar interactive data system that instantly generates the best machine learning models from a list of possible pipelines to use with existing data sets in order to produce predictions for patient health outcomes.
- Performed system diagnostics, ran prediction tasks using scikit-learn, and cleaned large data sets on the "virtual data scientist" component of Northstar.

Brown University Department of Computer Science

Providence, Rhode Island

TEACHING ASSISTANT

January 2019 - May 2019

- Held twice-weekly office hours and graded assignments, midterms, and finals for machine learning course.

Boomerang

Mountain View, California

SOFTWARE ENGINEERING INTERN

Summer 2018

- Created a backend server for the web development team using Django.
- Prototyped a new contact card application in Angular for integration with the Boomerang extension.

Telesense

Sunnyvale, California

SOFTWARE ENGINEERING INTERN

Summer 2017

- Created a skeleton for the 2.0 phone application of the startup using Apache Cordova, JavaScript, HTML, and CSS.
- Designed the user experience and user interface for the prototype using Proto.io.

Programming Projects

LUNCH GROUPER (ANGULAR)

- Solves the problem of who to sit with at lunch by randomizing people into a given number of groups.
- Created to help Boomerang make lunch reservations as the company scaled during Summer 2018.

ONION (PYTHON)

- A web application that asks users to differentiate between real and fake news headlines. Used to gather statistics on how often people would believe what they read from unreliable sources.

Skills

SOFTWARE SKILLS

- Python, Java, Matlab, Scala, OCaml, C, TypeScript, JavaScript, HTML, CSS, MongoDB, Flask, FastAPI, Angular, Git