

Tianqi (Andy) Wu

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OBJECTIVE

MS in Computer Science student seeking software engineering internship for summer 2023.

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

Expected Graduation: Dec 2023

Major: Master of Science in Computer Science

Relevant Coursework: Computer Systems, Web Application Development, Machine Learning

Washington University in St. Louis | St. Louis, MO

Graduated May 2022

Major: Bachelor of Science in Computer Science

Cumulative GPA: 3.93/4.0 | TBP Member | Productive Scholarship in Engineering | Latin Honor

Relevant Coursework: Software Engineering Workshop, Mobile Application Development, Database Management Systems, Visual Analytics, Data Visualization, Cloud Computing

PROFESSIONAL EXPERIENCE

Software Engineering Intern, Adalo

Jun 2021 – Aug 2021

- Implemented and improved core features for cross-platform application building software, covering **~25 million** monthly active users
- Crafted frontend components with **React, React-Native, and Redux**
- Cooperated with product design team to navigate technical constraints and possible refinements
- Created testing guidelines and launched testing for new components

Research Assistant, WashU Visual Data Analysis Group

Feb 2021 – May 2021

- Designed a visual analysis web application for tracing epidemic spread and identifying methods of transmission on **~1 million** microblog messages
- Introduced keyword searching and geological filtering with **Flask** and **MySQL**
- Refined user interface and data visualization features with **React, Bootstrap, D3.js, and Mapbox**
- Refactored backend structure and enhanced efficiency by **~40%**

Software Engineering Intern, Enhearten

Aug 2020 – Sep 2020

- Developed a cross-platform microblogging application **from scratch** for doctors to trace and analyze patients' mental health status and react immediately in emergencies
- Initiated core application features with **React Native** and **Firebase**

SELECTED PROJECTS

SafeMap – ST Hacks Hackathon

Jan 2021

- Led a team of four for a one-shot COVID risk management platform for Toronto population (**~3 million**) with visualizations of infection rates by community and personalized travelling recommendations
- **Won first prize** (out of 40 projects) and Wolfram Award
- Crafted visualizations and location search features with **Leaflet.js** and **Google Map APIs**

Movie Recommendation System with Netflix Data

Dec 2019

- Implemented a cloud-based movie recommendation system with collaborative filtering
- **Placed second** for final project competition with **~30 groups** in terms of accuracy and performance
- Analyzed movie ratings data (**~80MB** plain text files) using **Spark** with Jaccard similarity measure
- Deployed program for cloud execution on **Amazon EMR, EC2 & S3**
- Tuned hyperparameters and optimized code for cloud execution, improving overall efficiency by **~50%**

Spring4 – Personal Finance App

Dec 2019

- Led a team of four to build an iOS finance app for managing stock and budgets
- Designed data visualization features with **Charts**
- Launched backend features with **Firebase** and **World Trading Data APIs**

TECHNICAL SKILLS

Languages: Java, JavaScript, Python, C++, MATLAB, HTML, CSS, Swift, SQL, PHP, C, Bash, Ruby

Frameworks & Libraries: React, D3.js, Angular, Express, Flask, React-Native, Spark, TensorFlow, Hadoop

Tools & Operating Systems: Linux, Git, Docker, Visual Studio Code, XCode, Eclipse