

Ben Tran

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SUMMARY OF QUALIFICATIONS

- Developed simulation software, Android applications, and web applications
- Project management on multiple development teams at University of Illinois, spanning in research and class projects
- Eager to learn and capable of self-acquiring necessary skills to improve

RESEARCH EXPERIENCE

PeopleWeave

Champaign, IL

Backend Developer

Aug. 2021 – Jan. 2022

- PeopleWeave was featured in SIGCOMM 2021 virtual conference as the primary connection tool for hundred of researchers/attendees to use, serving as the tool for recommending researchers to connect in a COVID-restricted environment
- Worked with Professor Matthew C. Caesar's group in designing and implementing the backend recommendation system. Incorporated ML-based graph structure for fast query of individuals with similar interests to a person's own research field, similar to vector databases
- Utilized Python and MongoDB to build the recommendation system

Costa Rican Airport Customs

Champaign, IL

Full Stack App Developer

Feb. – May 2022

- Improved an Android app that can assist all Costa Rican travelers to ease their airport customs process, with Professor Roberto Rojas-Alfaro as the client. Organized a team of 3 to participate frontend and backend development
- Java and Firebase were incorporated in the research project

PROJECT EXPERIENCE

Class Projects

Champaign, IL

IStudySpace

Aug. – Dec 2021

- Coordinated a team in developing an Android app that assist all UIUC students in finding dozens of study & Zoom locations on campus, taking COVID restrictions, noise level, amenities, and distance preferences into account
- Incorporated Java to handle Google Maps activities, the splash screen, and the search feature

Heated Crimes

Aug. – Dec 2021

- Coordinated a team in developing a website that predict crimes in Chicago via correlating crime data with weather data
- Utilized Flask and SQL database for the website

Code Flow and Prompt Engineer

Jan. – May 2023

- Organized a team in performing static program analysis on public code and prompt-engineered ChatGPT to analyze its comprehension capabilities on public code's data flow and control flow
- Revealed up to 60% error rate in the 3.5 model under data flow fluctuation of various degree
- Used CodeQL for code analysis and Python to incorporate ChatGPT CLI for scripting ChatGPT's responses

Derecho Benchmark

Jan. – May 2023

- Organized a team in analyzing Derecho, a C++ library for fast state-machine replication on RDMA-based hardwares
- Yielded bandwidth results from data replication that exceeds the network link limit of up to 2x
- Used C++ for designing and running benchmark on Cloudlab's RDMA clusters, Python graphing for metric analysis

Self-taught Projects

- Developed several projects during free time to explore the industry-standards tech stack and satisfy self-interests
- Projects include cryptocurrency trading bots in Node.js, 3D simulation with C++, auto-ramp time-lapse React app, and more

EDUCATION

Illinois Valley Community College

Oglesby, IL

- Associates in Science (4.0 GPA)

May 2020

University of Illinois at Urbana-Champaign

Champaign, IL

- Bachelors in Computer Science (3.84 GPA)

May 2022

- Professional Masters in Computer Science (3.33 GPA)

May 2023

TECHNICAL SKILLS

- **Languages & Tools:** Java, C, C++, Python, Golang, Haskell, HTML, CSS, Javascript, Docker, CodeQL
- **Operating Systems:** Linux, Windows, MacOS
- **Database:** SQL, MongoDB, Firebase

SOFT SKILLS

- **Teamwork, Leadership, Time Management, Self-motivated, Attentive to Details, Flexible, Communication**

REFERENCES

- **Will be available upon request**