

Rong (Abby) Xu

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Education

Texas A&M University College Station, TX
Bachelor of Science in Computer Science with minor in Cybersecurity and Mathematics Expected: Dec. 2023

Cumulative GPA: 3.7/4.0

Relevant Coursework: Engineering Computation, Artificial Intelligence, Data Analysis for Cybersecurity, Parallel Computing, Unix System Admin, Cloud Computing, Computer and Network Security, Human Computer Interaction

Skills

- **Programming:** Python (Proficient), C++ (Proficient), Java, JavaScript, TypeScript, HTML, SQL
- **Software:** React, Flask, FastAPI, MongoDB, DynamoDB, PostgreSQL, Docker, Vim, Git, Linux, Ubuntu Server, Latex, JIRA, Figma
- **Awards:** Aggies Invent 2022 (3rd Place, \$500), Educating Smart Marine Aggies Robotic Technologies Competition 2020 (1st Place, \$500), TAMUhack 2021 (Best Hardware Hack)

Internship Experience

Amazon | *Software Dev Engineer Intern / Fire-TV Telemetry Team* May 2022 - Aug. 2022

- Built a full-stack web portal to enable rest FireTV teams onboarding to involve with confidential device log data, resulted in a 30% reduction in the process time and provided a universal platform for data collection and status tracking
- Used React for the front-end, AWS's DynamoDB for an intermediate DB, and API Gateway for back-end integration (CRUD data)
- Designed and completed detailed documentation regarding intermediate/backend API endpoints & database schemas

Splunk | *Technical Marketing Intern – Security* May 2021 - Aug. 2021

- Designed and built the ETL pipeline to import infosec vendor sample data from 200+ sources into a new globally distributed demos environment to improve the event and product marketing flexibility in use, providing cost-saving options on 60k annual demonstration across 3 regions with permission outside of isolation through unlocking data stuck within a static demonstration
- Exported sample data and Splunk Search Processing Language (SPL) code of dashboards to re-build corresponding demos on the cloud
- Transformed unstructured machine data, iterated utilization resulting in 75% run-time improvement, and completed the 45-min ES demo presentation with another teammate

Research Experience

Portable Virus Detection Platform | *Innovation[X] SDE Group/ Texas A&M University* Sept. 2021 - May 2022

- Assisted to detect air-born bacteria and viruses in aerosol samples involved with Bio Group and HDE Group
- Implemented portable Point-of-care testing with a teammate, focusing on Android app, web portal and image processing
- Involved with user authentication, allowing users to scan the in-droplet sample, get the result in 30s and save to the cloud

Project Experience

GymBuddy | *Team Project* Jan. 2023 – May 2023

- Built a web app to make reservation of equipment in fitness center with a real-time status tracker dashboard
- Used MongoDB as a database, implemented related algorithms with FastAPI and utilized React as front-end framework

Building Ontology Classifier (Senior Capstone with Varis) Aug. 2022 – Dec. 2022

- Built a classifier to put product or service into a correct class of the Varis Ontology with classes arranged in a hierarchy
- Involved with using TF-IDF, SVM, BERT base model, T5 model to finish the project

Nutrist | *Team Project* Oct. 2021 – Dec. 2021

- Built a web app to provide users calories calculator and recipes recommenders with agile development
- Used APIs to get data, applied related algorithms with Flask framework, and deployed the website on Heroku with PostgreSQL database

Campus Involvement

TAMU Datathon | *Design Lead* Mar. 2021 - Present

- Design TAMU Datathon Website UI components and social posts with design team using **Figma** and **Canva**
- Helped coordinate one of Major League Hacking Data Science Hackathons with 600+ participants

Student Teaching Assistant Aug. 2020 - Present

- Held weekly lab for 120+ students enrolled in Intro to Python to explain the coding principles and program design
- Communicated with professor on students' feedback and class performance, and assisted in grading assignments