Tushar Tyagi

+1 (602)-813-9275 | tushartyagi@asu.edu | tushartyag1.github.io | linkedin.com/in/tushartyagidxb | Tempe, AZ

EDUCATION

Arizona State University

Tempe, AZ

Bachelor of Science in Computer Science | GPA: 4.0

Aug. 2021 - Dec 2024

Relevant Coursework: DSA, OOP, Intro to SWE, iOS App Dev, Human-Computer Interactions, Operating Systems, Computer Networks, Engineering Grand Challenges, Entrepreneurship | Leadership: 4x Student Leader (Grand Challenges Scholars Program), 4x Teaching Assistant, VP @ Python Users Group | Honors/Awards: NAMU Scholar (Merit-based; 62,000\$ scholarship), Panelist @ Digital Trust Summit & Data Privacy Day, Dean's List (All semesters)

EXPERIENCE

Software Engineering Intern

May 2024 - Aug 2024

 $Quicktron\ Robotics$

Dallas, TX

- First US Intern at this Chinese AMR warehousing startup; Led the establishment of **Quicktron's US-based** codebase enabling in-country hosting and deployment, thereby driving 500,000\$+ in new projects
- Traveled nationally to **configure and debug** Quicktron's robots and software systems, while also **independently** hosting 4 technical site visits for potential clients

UI/UX Designer & GenAI Lead

Nov 2023 – Present

NX Lab: Enterprise Technology Office | Arizona State University

Tempe, AZ

- Senior Studio Associate @ ASU's flagship VR Lab; Directly worked with & presented to HNIs
- Led weekly meetings to develop GenAI tools, enhancing efficiency multifold within NX Lab's guilds/projects
- Extensively conducted user research, developed personas, created user flows, & wireframed in Figma for 2 Digital Twin projects focused on immersive city promotion & digital equity, funded by state institutions

Data Analyst Oct 2022 – Present

Neural Engineering Lab | Arizona State University

Tempe, AZ

- Utilized ASU supercomputers to analyze a 32-channel 12-category dataset of microelectrode recordings from a human brain using MATLAB & Python to study speech processing in humans from scratch
- Conducted PCA & CNN Decoding of 8,800 spectrogram images achieving >98% accuracy
- Presented research work at a national conference; Featured in ASU's annual magazine; Publication in progress

Project Manager & Consultant

Nov 2021 - May 2023

Engineering Projects in Community Service | Arizona State University

Tempe, AZ

- Mentored engineering projects at ASU & high schools across Arizona, **providing guidance to 30+ teams** on their design documents, project pitches, technical challenges, and project hurdles over **weekly meetings**
- Reviewed 20+ project pitches & 40+ design documents, allocating over >50,000\$ in project funding and scholarships from ASU. Also conducted 25+ skill sessions for students, teaching Python, SQL, pitching, etc.

PROJECTS

MySchoolSouq | Swift, Google APIs, Firebase, MVVM, Figma, XCode

- * Published iOS App that facilitates users to buy or sell used books within their city (in Beta mode)
- * Implemented Firebase for auth/storage, auto-location book search, and API-based ISBN info fill for postings

DataDaddy | Python (GPT4, FastAPI, matplotlib, scikit), Docker, React/Node.js

- * Developed frontend for an AI-driven data analysis tool that generates unique insights & plots from CSV files
- * Won the Capital One Sponsor Prize at PennApps XXIV (UPenn's annual flagship hackathon)

Lesson Planner | OpenAI API, Python, Flask, HTML, CSS, Heroku

- * Indepedently produced an **OpenAI-based lesson planner** for teachers of The Digital School initiative customized based on subject, region, class, duration, and sample templates
- * Won 3rd Prize @ CodersHQ Hackathon, Dubai sponsored by the Prime Minister's Office, UAE

Web Messenger | React, HTML, CSS, JavaScript, Firebase, Vercel

* Built a full-stack web chat app inspired by iMessage's aesthetics, incorporating email-based user authentication and real-time data storage and synchronization; Deployed and hosted on Vercel

SKILLS

Languages: Python, Java, C++, Matlab, SQL, HTML, CSS, JavaScript, Swift, Scheme, Assembly x86-64
Frameworks & Libraries: Matplotlib, Pandas, Tkinter, TensorFlow, Numpy, Flask, BeautifulSoup, Scikit-Learn
Tools & Technologies: React, Node.js, MySQL, Unity, Firebase, Vercel, Heroku, Git, Google Cloud Platform, AWS,
Figma, Arduino, REST, Docker, Linux, VS Code, XCode, IntelliJ, Eclipse, ArcGIS, Jira, Audacity, Tableau, Trello
Others: Market Research, Competitive Analysis, Agile, Product Management, Leadership, Cross Functional