Amrit **Rathie**

SOFTWARE ENGINEERING INTERN

3401 Lookout Ct, Grapevine, TX 76051

📱 (817) 888-1378 | ✉ amrit.rathie@utdallas.edu | 🏠 www.amritr.xyz | in amrit-rathie

Projects

Septre Insights | Diagnose 7 diseases with a smartphone   *HackUTD VIII*

HackUTD - LARGEST UNIVERSITY HACKATHON IN TEXAS   *Nov 2021*

- Built PyTorch Machine Learning dataset by
- Used ML model to diagnose 7 different diseases, including diabetes and glaucoma, using digital fundoscopy with over 85% accuracy.
- Developed Vue.js Frontend and Swift Mobile App connected to Flask API with PostgreSQL Backend.

Degree Planner | Drag and drop degree planner app for UTD courses   *The University of Texas at Dallas*

UTD NEBULA - STUDENT ORGANIZATION CREATING OPEN SOURCE SOFTWARE FOR STUDENTS   *Fall 2022*

- Implemented Course Validation functionality, allowing users to verify their class schedule.
- Contributed Degree Plan Validation functionality, enabling automatic auditing of a degree plan without an advisor.
- Mentored a group of 4 students on frontend technologies HTML/CSS/JS, TypeScript, and Next.js.

Comparison of Swarm Robotics Algorithms | Cooperation of a swarm of simple robots   *The University of Texas at Dallas*

ACM RESEARCH - 12-WEEK RESEARCH COMPETITION   *Fall 2021*

- Compared 3 algorithms for controlling robotics with decentralized control and cooperation.
- Designed simulation to collect behavioral data of robots performing resource collection tasks using C++ and Unreal Engine.
- Analyzed simulation data for statistical differences using Pandas and visualized data for presentation using Seaborn.
- Presented at the Biannual ACM Research Symposium.

Professional Experience

ObjectWin, Inc.   *Houston, Texas*

MOBILE APPLICATIONS DEVELOPER - SUMMER INTERNSHIP   *Jun 2020 - Aug 2020*

- Developed mobile application for time-sheet entry using Ionic.
- Collaborated with a global team to connect frontend components written in AngularJS with SQL Server database.
- Ameliorated time-sheet entry for consultants at tech consulting company.

Skills

Programming Languages	Rust, Python, SQL, JavaScript, Go, Java, Bash, C, C++, Haskell, LaTeX, MIPS & ARM Assembly
Tools and Platforms	Linux, Docker, Git, Ansible, Kubernates, Cloudflare, AWS, PostgreSQL
Libraries	Numpy, Pandas, Seaborn, Flask, FastAPI, Jinja2, Gin, Go Template, Vue/Nuxt, React/Next, Rocket, Tokio
Languages	English (native), Hindi (elementary), Marathi (conversational), American Sign Language (elementary)

Education

2021-2025 **The University of Texas at Dallas**, B.S. in Computer Science   *Richardson, Texas*

2017-2021 **Grapevine High School**, High School Diploma   *Grapevine, Texas*

Awards

2021   **Academic Excellence Scholarship**, The University of Texas at Dallas   *Richardson, Texas*

2019-2021 **AP Scholar with Distinction**, Grapevine High School   *Grapevine, Texas*

2020   **National AP Scholar**, Grapevine High School   *Grapevine, Texas*

2019   **Director's Choice**, Grapevine High School Band   *Grapevine, Texas*