

Amrit Rathie

SOFTWARE ENGINEERING INTERN

3401 Lookout Ct, Grapevine, TX 76051

☎ (817) 888-1378 | ✉ amrit.rathie@utdallas.edu | 🏠 www.amritr.xyz | 📺 Spaceface16518 | 🌐 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 funduscopy 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, Kubernetes, Cloudflare, AWS, PostgreSQL
Languages	English (native), Hindi (elementary), Marathi (conversational), American Sign Language (elementary)

Education

The University of Texas at Dallas

Richardson, Texas

B.S. IN COMPUTER SCIENCE

2021-2025

- Academic Excellence Scholarship Recipient.

Grapevine High School

Grapevine, Texas

HIGH SCHOOL DIPLOMA

2017-2021

- Vice-President of Advanced Academics Student Club.
- Flute Section Leader in Marching Band.
- TFA State World-Schools Debate competition finalist.

Awards

COLLEGE BOARD

- 2020 **National AP Scholar**, Grapevine High School
- 2019-2021 **AP Scholar with Distinction**, Grapevine High School

Grapevine, Texas

Grapevine, Texas

BAND

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

Grapevine, Texas