

# Raunak Upreti

(682)-239-4414 | [raunakupreti2002@gmail.com](mailto:raunakupreti2002@gmail.com) | [LinkedIn](#) | [GitHub](#) | [Website](#)

## Education

### University of North Texas

Bachelor of Science in Computer Science

Relevant Coursework: Software Engineering, Computer Security, Computer Networks, Operating Systems

May 2025

Denton, TX

## Work Experience

### Ergool

Mar 2024 – May 2024

Software Engineering Intern

New York, NY

- Conducted system integration and user acceptance testing (UAT), ensuring high-quality software performance.
- Collaborated with cross-functional teams to analyze product testing requirements and develop test strategies.
- Performed root-cause analysis, implementing corrective actions that improved mobile application stability.
- Developed and executed test plans for new and existing products, enhancing software reliability.
- Analyzed test results and identified areas for improvement, contributing to continuous quality enhancements.

### University of North Texas

May 2024 – Present

Information Technology Support Assistant

Denton, TX

- Provided technical support for faculty, and staff, troubleshooting hardware, software, and network issues across Windows, macOS, and mobile devices.
- Resolved technical support tickets, weekly, ensuring efficient problem resolution and minimizing downtime.
- Assisted in IT infrastructure projects, optimizing system performance and implementing security updates.
- Delivered user training sessions on software application and IT best practices, improving staff proficiency.
- Stayed updated on emerging technology trends to enhance IT support services.

## Projects

### Shop Simplify | React, NodeJS, Express, Firebase

May 2024

- Developed a secure peer-to-peer marketplace using React, Node.js, and Express.
- Implemented Firebase Firestore, Firebase Authentication, and Firebase Storage for real-time data, user authentication, and media handling.
- Implemented secure payments, in-app messaging, and scam reporting for enhanced platform security.

### JWKS Authentication Server | Python (FastAPI), SQLite, JWT, AES, Argon2

Jan 2025

- Developed a RESTful JWKS server supporting RSA key rotation with **kid** identifiers and key expiration for secure JWT validation.
- Built **/auth** and JWKS endpoints for token issuance and public key distribution, including handling of expired key requests.
- Integrated SQLite for persistent RSA private key storage, serializing to PEM and securing keys with AES encryption (env-based secret).
- Implemented user registration with secure UUID-generated passwords, Argon2 hashing, and a user table with timestamps.
- Logged all auth attempts with request metadata and user linkage, enhancing observability and auditability.

## Skills

**Languages:** JavaScript, Python, C, C++, HTML, CSS

**Frameworks:** React, Node.js, Express.js, FastAPI, Tailwind CSS, Bootstrap

**Developer Tools:** Git, npm, Jira, AWS, Docker, Google Cloud Platform, Firebase

**Databases:** PostgreSQL, MongoDB, SQLite

**Methodologies:** Agile, Scrum