

ANGEL SINGH SHRESTHA

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EDUCATION

The University of Texas at Arlington

Bachelor of Science in Computer Engineering, GPA: 3.92 / 4.00

Arlington, TX

Expected May 2028

EXPERIENCE

Service Desk Analyst

Office of Information Technology, The University of Texas at Arlington

Jun 2025 – Present

Arlington, TX

- Administered user accounts, security groups, and role-based access control using ADUC and the Microsoft Admin Portal while supporting mission-critical Linux and Windows systems through incident troubleshooting and resolution.
- Developed internal JavaScript automation scripts to streamline operational workflows and reduce manual effort.
- Promoted to **Tier II** in Dec 2025 to handle escalated incidents involving identity management, access control, system reliability, and uptime.

Undergraduate Research Assistant

The University of Texas at Arlington (CRA UR2PhD)

May 2025 – Jul 2025

Arlington, TX

- Conducted research on 3D in-memory computing architectures focused on memory-centric computation and scalability.
- Analyzed hardware-software tradeoffs through literature review and proposal development.

PROJECTS

IntellinMonk | Django REST Framework, React, MySQL, AWS, Zabbix

Jan 2024 – Present

- Designed scalable RESTful APIs using Django REST Framework, implementing authenticated CRUD operations and request validation, capable of handling 1K+ requests/day with average latency under 120 ms, architected for horizontal scaling.
- Deployed backend services on Linux-based AWS EC2 with MySQL-backed persistence, environment-based configuration, and Zabbix monitoring for metrics, uptime, and alerting, achieving 99.5% uptime.

Networking Homelab | Proxmox, pfSense, AWS EC2, Nginx, WireGuard, Zabbix, Splunk

2023 – Present

- Built a virtualized homelab hosting 10+ services using Proxmox, implementing network segmentation, subnetting, and service isolation designed for scalability.
- Implemented an outbound firewall on AWS EC2 with Nginx reverse proxy, configuring firewall rules, NAT, port forwarding, and HTTP/HTTPS routing; achieved 900+ Mbps throughput with sub-5 ms latency, monitored via Zabbix and Splunk.

AI Soap Quality Detection | Machine Learning, Sensors, Python

Feb 2024

- Developed an AI model using SUDS sensor data achieving 100% accuracy in detecting defective samples during validation.
- Logged training and inference outputs for analysis, contributing to the project receiving the Best Group Presentation Award.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, R

Frameworks: Django, Django REST Framework, React, Flask, FastAPI

Backend: REST APIs, CRUD, Authentication, Authorization, ORM, Pagination, Validation

Cloud / Infrastructure: AWS (EC2), Linux, Docker, Proxmox, Virtualization

Networking: TCP/IP, DNS, NAT, Subnetting, Routing, Firewalls, VPNs, pfSense, WireGuard

Monitoring / SRE: Zabbix, Splunk, Metrics, Logs, Alerts, Uptime Monitoring

DevOps / Tools: Git, CI/CD (GitLab, Jenkins), Bash/Shell, VS Code, IntelliJ

Databases: MySQL, Relational Schema Design

CERTIFICATIONS

- **The Bits and Bytes of Computer Networking** — Google (TCP/IP, DNS, Routing, Firewalls)
- **Python for Data Science, AI & Development** — IBM
- **Introduction to Databases for Backend Engineering** — Meta
- **Django Web Framework** — Meta