

Kush Gupta

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Education

Texas A&M University | Bachelor's in Computer Science

Aug 2022 - May 2026

GPA: 3.6/4.0

Courses: Data Structures & Algorithms, Object-Oriented Programming, Computer Architecture, Database Design

Honors: President's Endowed Scholarship, awarded to 25 out of 70,000 students for academic excellence.

Professional Experience

TAMU Faculty Affairs | Software Development Intern

Apr 2024 - Aug 2024

- Automated retrieval and organization of 5,000 faculty files using Python scripts and Power Automate workflows, streamlining data availability across departments.
- Reduced data processing time by 50%, saving over 20 hours/week and \$20,800 annually in labor costs.

Allen Tutors Elite | Founder

Apr 2020 - Apr 2024

- Managed a team of tutors to help 250 clients achieve their goals in Programming, Math, English, and SAT.
- Improved client scores by an average of 35% within 6 months, with 100% of clients reaching their desired proficiency.

Discover AI | Student Researcher

Aug 2023 - Dec 2023

- Collaborated with a team to analyze 200,000 social media posts using machine learning, enabling marketing strategy adjustments based on sentiment analysis with 82% accuracy.

Merlin Mavens | Computer Science Mentor

Jan 2020 - May 2022

- Mentored 120 high school students in computer science principles and the fundamentals of Swift development, with over 80% of my students scoring 5/5 on the AP Computer Science exam.

Leadership

A&M BUILD | Command Team Leader

Jan 2024 - Present

- Directed sourcing and materials procurement for Texas Aggie Medical Clinics (TAMCs), deployed in Ukraine to facilitate critical medical services for over 25,000 civilians.
- Managed a \$50,000 budget while utilizing global partnerships to cut costs by 30%, resulting in the construction of 11 medical clinics to date.

Computer Science Club | Board Officer

Aug 2022 - May 2024

- Organized and competed in 6 hackathons and 24 club events. Elected onto the board to expand outreach, resulting in 50% membership growth over 2 years.

FRC Robotics | Lead Developer

Aug 2019 - May 2022

- Spearheaded the programming of a \$10,000 robot that achieved national finalist standings among 3,000 competing teams.
- Implemented real-time object detection using PyTorch with a 97% accuracy rate, improving task completion time by 100%.

Projects

RenoVision

- Built an AR application using Swift and ARKit for real-time 3D property scans, cutting down manual inspection time by 50% and saving approximately \$6,000 annually. Developed a robust backend with Flask and Google Cloud technologies, including Firestore and Vertex AI.
- Trained a Tensorflow machine learning model with 18,000 data points to assess property conditions with a 95% accuracy rate. Generated narratives using a custom LLM built with OpenAI and LangChain.

Eagle Schedule Builder

- Led a team of 20 peers to develop a scheduling website for 6,000 students, streamlining the course selection process and reducing scheduling errors by 70%.
- Implemented backend infrastructure using Swift, REST API architecture, and MySQL, ensuring a robust and scalable system capable of handling 100,000 users.
- Partnered with district administration to construct a database of 450 courses. The website launch achieved a 95% adoption rate among students, significantly improving their scheduling experience.

Skills

Languages: C++, Python, Swift, Ruby, Java, Racket, SQL

Frameworks and Technologies: Git, ARKit, Flask, PyTorch, TensorFlow, LangChain, Google Cloud