KARAN VASUDEVAMURTHY

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Education

- **Master of Science** — **University of Texas at Arlington** — **Expected Graduation: May 2025**
  Computer Science — *GPA: 3.82 / 4.0* — *Arlington, TX, US*
- **Bachelor of Engineering** — **Dayananda Sagar College of Engineering** — **2019-2023**
  Computer Science and Engineering — *GPA: 3.4 / 4.0* — *Bangalore, India*

Skills

- MySQL | C | C++ | Python | HTML5 | CSS3 | JavaScript | Git | Linux
- Artificial Intelligence | Computer Vision | Machine Learning | Android Development | Software Engineering | Computer Networks
- NumPy | Pandas | Scikit-learn | TensorFlow | MediaPipe | OpenCV | Flask | Docker | Figma | Streamlit

Experience

Graduate Teaching Assistant — **University of Texas at Arlington** — **08/2024- Current**

- Supervised and instructed lab sessions on cybersecurity, covering cryptography, user/system/network security, and buffer overflows, improving students' practical skills and understanding.
- Conducted hands-on activities and demonstrations, leading to enhanced comprehension of key cybersecurity concepts.
- Graded assignments and exams, maintaining academic integrity and provided feedback to students.
- Addressed and resolved student queries with coursework, contributing to improved academic performance.
- Gained teaching experience as part of my professional development

Software Engineering Intern — **Visteon Corporation** — **09/2021 - 03/2022**

- Automated image annotations and facial landmark detection to enhance driver-assistance technologies, improving accuracy and safety features.
- Contributed to the design of photometric alignment algorithms for the surround-view system, advancing the Mahindra XUV 700's market leadership with a 46% share in 2022.
- Integrated reverse camera features into Android OS, improving user satisfaction through rigorous testing and debugging, solidifying the company's position in in-car entertainment and safety experiences.

Projects

- **Sentiment Analysis of IMDB dataset:** Led a team of three to compare LSTMs, Bi-LSTMs, and transformer models like BERT, achieving better accuracies and stability than reference papers by addressing overfitting through model modifications. GitHub **(12/2024)**
- **Briefly:** Designed and built a news aggregation and analysis application for HackUTA 2024, which fetches news from the News API and generates concise summaries for quick reading in under 60 seconds. The app, deployed using Streamlit, features trust scores, sentiment analysis, and a fact-checking tool to enhance information credibility. GitHub **(10/2024)**
- **Musiqi:** Developed a music player with Vite, Shazam API, and Firebase in a team project. GitHub **(05/2024)**
- **LocalGPT:** Created a local GPT implementation based on a popular private GPT GitHub repository, leveraging the Nous-Hermes-13B-GGML model to create a lightweight and more accessible version. GitHub**(12/2023)**
- **Fake News Detection:** Contributed to a pioneering fake news detection project that developed India's first true news dataset using press releases, leveraging advanced techniques like transformers, embeddings, and cosine similarity to assign comprehensive trust scores to user tweets (now posts on X). GitHub **(05/2023)**
- **Skin Cancer Detection:** Led a team of four to develop a skin cancer detection system using CNNs, classifying skin lesions into seven categories, and created a user-friendly Android application to facilitate accessible diagnosis. GitHub **(08/2022)**
- **College Management System:** Designed and developed a college management for Dept. of CSE, DSCE, Bangalore. GitHub **(09/2021)**

Publications

- Modi, K., Shreshth, S., **Vasudevamurthy, K.**, Yadav, H., & D, S., V. (2023). A literature survey on “Misinformation Flagging System.” International Journal for Research in Applied Science and Engineering Technology, 11(1), 1705–1711. https://doi.org/10.22214/ijraset.2023.48911

Certifications

- **IBM-** Full-Stack JavaScript Developer Professional Certificate. **(Ongoing)**
- **Meta-** Introduction to Android Mobile Application Development. **(07/2024)** Certificate