Skandana Gowda

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EDUCATION

The George Washington University — Washington, D.C, USA
Master of Science in Computer Science — Aug 2023 – May 2025
GPA: 3.78/4.00 | SEAS Merit Award
Coursework: Design and Analysis of Algorithms, Machine Learning, Big Data Analysis, AWS Cloud Computing, Deep Learning and Neural Network, Computer Vision, Database Management System

Dayananda Sagar Institutions — Bangalore, India
Bachelor of Engineering in Computer Science — Aug 2018 – Jul 2022
Coursework: Data Structures and Applications, Object Oriented Concepts, Data Mining and Data Warehousing, User Interface Design

TECHNICAL SKILLS

Programming and Scripting: Python, C, C++, Java, C#, JavaScript, SQL, HTML, CSS, Bootstrap, PHP
AI, Data Science and Big Data Technologies: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, PyTorch, TensorFlow, Keras, Spark, Hadoop
Development Technologies and Tools: Docker, Jenkins, Git, Bitbucket, VS Code, Jupyter Notebook, Google Colab, Linux
Databases, APIs and Analytics: MySQL, PostgreSQL, MongoDB, FastAPI, Postman, Power BI

WORK EXPERIENCE

Software Engineer I — Bangalore, India
Telestream — Jul 2022 – Jul 2023
- Developed and optimized backend services for PRISM, a video engineering and post-production tool, improving scalability and performance.
- Designed and integrated new backend tools, including the External Reference app, leading to a 15% increase in user satisfaction while refining system efficiency and functionality.
- Optimized processing algorithms and refactored code, achieving a 20% boost in processing speed and reducing bugs by 30%, ensuring a high-performance, reliable backend system.
- Collaborated across teams to refine software architecture, drive innovation, and contribute to feature development in an agile environment.
- Utilized key technologies such as C++, Docker, Jira, Bitbucket, PuTTY, Postman, and VS Code for efficient development, testing, and deployment of backend services.

Full Stack Developer Intern — Bangalore, India
Tequed Labs — Sep 2021 – Oct 2021
- Developed a photo gallery website with JavaScript, Bootstrap, PHP, and MySQL for image upload, viewing, and deletion.
- Optimized framework performance, reducing site load times by 25% and increasing user engagement by 30%.
- Collaborated with the team, contributing ideas in meetings, and providing regular development updates.
- Implemented key UI components, including the navigation bar, header, footer, home page, and photo-detail view, ensuring a seamless user experience.

Web Developer Intern — Ahmedabad, India
PackBagBuddy — Dec 2020 – Feb 2021
- Contributed to the redesign of the company website, improving navigation and user interface for a better user experience.
- Proposed and implemented new features, boosting site performance by 20%.
- Identified and fixed critical bugs under tight deadlines, reducing user-reported issues by 15%.
- Worked closely with senior developers on research and optimization to enhance application efficiency.

PROJECTS

3D Object Generation Using Generative Adversarial Network — Nov 2024 – Dec 2024
- Built a GAN with a 5-layer generator and discriminator to generate realistic 3D objects.
- Trained using adversarial learning with binary cross-entropy loss and Adam optimizer for stability.
- Monitored performance, visualized outputs, and fine-tuned hyperparameters to minimize mode collapse.

Toxic Comment Classification: Comparative Analysis of LSTM and Naive Bayes — Mar 2024 – May 2024
- Developed and compared LSTM and Naive Bayes models using Kaggle's Toxic Comment Classification dataset.
- Applied text preprocessing techniques like cleaning, tokenization, and lemmatization for high-quality input.
- Achieved an F1-score of 0.8457 with LSTM and precision of 0.8902 with Naive Bayes, analyzing trade-offs in recall and false positives.
- Evaluated model performance to guide selection based on accuracy, efficiency, and application needs.

Smart Assistance Application for the Visually Impaired — Sep 2021 – May 2022
- Designed and implemented a real-time object detection application using TensorFlow, Python, and the COCO dataset, enabling visually impaired users to navigate their surroundings with AI-driven voice feedback for enhanced accessibility and independence.
- Developed and deployed a server-side machine learning model for advanced image processing and real-time object classification, integrating voice-based alerts to provide users with instant feedback based on object proximity for enhanced situational awareness.
- Enhanced system performance and accuracy by integrating Python text-to-speech for seamless and reliable assistance.
- Published the project in IJCRT, showcasing AI's role in improving independent living for visually impaired individuals.

LEADERSHIP / EXTRACURRICULAR

GeorgeHacks 2025 — Mar 2025
- Developed AgriVantage, an AI-powered voice assistant for farmers using FastAPI, Twilio, OpenAI, and a RAG-based retrieval system for real-time sustainable farming solutions.

Student Front Desk Assistant | Student Front Desk Assistant, GWU — Aug 2024 – Present
- Strengthened problem-solving, multitasking, and communication skills applicable to technical roles.

Data Science Project Team Member | Data Science for Sustainable Development (DSSD), GWU — Aug 2024 – Dec 2024
- Worked on GIS data analysis and built dashboards with Tableau for sustainable development.