

VAMSHI KRISHNA GAREGA

TX, USA || +1 (830) 359-9463 || vamshikrishna9031@gmail.com
<https://www.linkedin.com/in/vamshi-krishna-garega/>

SUMMARY

Accomplished computer science graduate with specialized expertise in software analysis, full-stack development, and AI research. Proficient in programming languages and adept at problem-solving, with a keen focus on driving innovation in software and AI projects.

Skilled in real-time tools and project management, demonstrating a proven ability to navigate complex development processes. Proficient in various domains including software development, ensuring end-to-end delivery of high-quality solutions that meet both technical and business requirements.

EDUCATION

Master's in Computer Science CGPA: 3.82/4.0

Texas State University

Aug 2022 – May 2024

San Marcos, TX

Bachelor's of Technology in Computer Science (AI Specialization) CGPA: 3.76/4.0

Koneru Lakshmaiah Education Foundation

July 2018 – June 2022

Hyderabad, India

TECHNICAL SKILLS

Programming Languages: C++, Python, Java, Linux, ReactJs

Tools and Environments: PyCharm, Eclipse, VS Code, Jupyter, AWS, EC2, TensorFlow, Jenkins, Docker, Git

Database Management and Data Analysis: MySQL, PL/SQL, Oracle, MongoDB

Web Development: HTML, CSS, JavaScript, NodeJS

PROFESSIONAL BACKGROUND

TEXAS STATE UNIVERSITY

San Marcos, Texas

Research Assistant

Aug 2022 – Present

- Spearheaded the development of computationally efficient algorithms for real-time applications, focusing on simulation-based optimization methods to address the unique needs of the United States Air Force in the information environment.
- Pioneered the implementation of the Adversarial Statistical Decision Theory (ASDT) framework for Joint All Domain Command and Control (JADC2), providing robust solutions to counter data manipulation threats.
- Actively contributed to the coding and advancement of proposed methods for adversarial decision models and games, incorporating statistical and machine learning inputs. Demonstrated proficiency in algorithm and data structure design, critical for ensuring the functional quality of the released algorithm.

ERNST AND YOUNG (EY)

Bengaluru, India

Senior Software Analyst

Feb 2022 – July 2022

- Played a key role as a Senior Software Analyst in a dynamic and fast-growing team, offering technological solutions to businesses navigating digital transformation challenges.
- Utilized Maven and Kafka Queues for project management, dependency management, and building Java applications, showcasing expertise in software development and IT operations.
- Supported projects employing both waterfall and agile methodologies, acquiring valuable experience in software development, IT operations, and application support.

HONORS

United States Airforce Office of Scientific Research Student Fellowship Grant (~\$16,000)

- Awarded the prestigious United States Airforce Office of Scientific Research Student Fellowship grant for outstanding academic and research achievements.
- Demonstrated a deep commitment to advancing knowledge, particularly in the development of computationally efficient algorithms for real-time applications, as highlighted in research projects.
- Acknowledged for contributing to cutting-edge research within the information environment, showcasing a strong foundation in algorithm and data structure design.

Texas State University Student Government Scholarship (Academic Year 2023 - 2024)

- Granted the Texas State University Student Government Scholarship, reflecting academic excellence and dedication to educational pursuits.
- Recognized for outstanding contributions to the academic community, aligning with a track record of successfully leading projects and contributing to the growth of the research and technology landscape.
- Highlighted commitment to personal and professional growth, a quality essential for excelling as a Technical Lead in software development.

PUBLICATIONS

***Title: "Command and Control with Poisoned Temporal Batch Data" Published in SPIE 12538 on June 12, 2023.
DOI: 10.1117/12.2663***

- This publication delves into the realm of command-and-control systems, specifically addressing the challenges posed by poisoned temporal batch data. This paper contributes to the advancement of strategies and frameworks for secure decision-making in dynamic environments.
- Recognition within the academic community through publication in a reputable SPIE journal, showcasing the impact of the research on the broader scientific and technological landscape.

ACADEMIC PROJECTS

Text Summarizer:

- Developed a sophisticated web application using Django, incorporating Natural Language Processing (NLP) and Machine Learning techniques to generate concise and meaningful summaries of web pages based on user-provided URLs.
- Implemented advanced algorithms for information extraction and abstraction, demonstrating a strong grasp of distributed computing principles to handle real-time summarization demands.

DotCom E-commerce Website:

- Led the full-stack development of a robust E-commerce platform using Python and Django, showcasing proficiency in backend and frontend technologies.
- Implemented features for order management and inventory tracking, utilizing distributed computing principles to ensure seamless performance and responsiveness.

Note Taking Application:

- Designed and implemented an Android application using React Native and NodeJS, providing users with an intuitive platform for efficient recording of important daily events and notes.
- Integrated Google Firebase for real-time data storage and synchronization, highlighting API integration skills.
- Utilized Bootstrap for responsive and user-friendly design, demonstrating a keen eye for user experience and frontend development.

CERTIFICATIONS: Artificial Intelligence Foundations - **NASSCOM**, Machine Learning with Python - **IBM and Coursera**, NDG Linux Essentials - **CISCO**, DevOps and Cloud Computing - **ByteXL**, Java Essentials – **Oracle**

ACTIVITIES: Event Coordinator - ISA TXST, Vice President - SAC KLU, Trooper - Bharath Scouts and Guides

HOBBIES: Peer Mentoring, Reading Newspapers, Listening Music, Dance and Politics