VAMSHI KRISHNA GINNA

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EDUCATION

UNIVERSITY OF MARYLAND BALTIMORE COUNTY   **Baltimore, Maryland**
Master's in Computer Science, CGPA 3.5/4.0   Aug 2022 – May 2024

VIDYA JYOTHI INSTITUTE OF TECHNOLOGY   **Hyderabad, India**
Bachelor of Technology in Computer Science, CGPA 3.8/4.0   Aug 2016 – Aug 2020

SKILLS

Languages: JavaScript, Java (Spring and Spring Boot), Python, C, C++, SQL, GraphQL, TypeScript
Database: MySQL, MongoDB, PostgreSQL, ElasticSearch, Sequelize, Hibernate, Mongoose
Web Development: HTML5, CSS, React Js, Angular Js, Node Js, Express Js, Bootstrap, Material UI, Redux, jQuery, Tailwind CSS
Cloud: Amazon Web Services- EC2, Lambda, S3, RDS, SQS, CloudWatch, IAM, Auto Scaling, ELB, Aurora, Google Cloud Platform - Compute Engine, GKE, Cloud SQL
Tools: Git/GitHub, Bitbucket, Postman, Linux, Docker, kubernetes, Apache Tomcat, Heroku, JUnit, Mocha, Mockito, Maven, JPA, Jenkins

PROFESSIONAL EXPERIENCE

ARDENT PRIVACY   **United States**
Software Developer - (Full stack)   **Aug 2023 – Present**
- Revamped a multi-tenant, cloud-native application, enhancing privacy compliance and performance by 30% using AWS and Docker containerization.
- Optimized secure GraphQL APIs with TDD and JWT authentication, achieving 40% better data efficiency and security enhancements.
- Engineered WebSocket-based notifications system for 500+ users, ensuring real-time updates and robust interaction via scalable software architecture.
- Scaled a Node.js-based file management system on AWS, increasing large-scale file processing efficiency by 35% through strategic cloud solutions.
- Led Angular and Material UI front-end development, integrating unit testing to ensure reliable application performance and enhanced user experience.
- Implemented DevOps practices and tools such as Jenkins, Git, and Terraform, improving CI/CD pipeline efficiency by 30%.
- Provided technical leadership and mentorship to junior developers, fostering a collaborative and innovative environment.
- Developed AI-driven metadata models for privacy risk identification using Python, boosting detection accuracy by 20% via innovative data privacy solutions.

UMBC   **United States**
Software Development Mentor (TA)   **Aug 2022 – May 2024**
- Mentored 3 JavaScript dev teams in React and Node.js, integrating Redux for state management, boosting project completion rate by 20%.
- Used Python and Django to guide teams through RESTful API development; enhanced code quality and reduced bug rates by 15%.
- Facilitated agile project management using Jira & GitHub, increasing team delivery efficiency and stakeholder satisfaction by 40%.
- Headed C++ and Java application development sessions, focusing on advanced data structures, which elevated team problem-solving skills.
- Refined SQL and PostgreSQL database integration in project workflows, reducing data retrieval times by 25% and enhancing reliability.

TATA CONSULTANCY SERVICES   **India**
Assistant System Engineer   **Jan 2021 – Aug 2022**
- Designed Java-based APIs using Spring Boot, integrating JPA and Hibernate for efficient data management, reducing query latency by 20%.
- Elevated AWS-based infrastructure, deploying scalable microservices with Docker and ECS, achieving 99.9% uptime and lowering operational costs by 15%.
- Developed SQL and NoSQL solutions using PostgreSQL and MongoDB, enhancing data retrieval speeds by 30% for high-load applications.

- Implemented comprehensive unit testing with JUnit and Mockito for Java applications, improving code coverage by over 25% within 6 months.
- Executed Python scripts for automated data transfers and system monitoring, reducing manual intervention time by 45%.

EZERKA TECHNOLOGY SOLUTIONS   **India**
Software Development Engineer & Co-Founder   **Jun 2019 – Dec 2020**
- Integrated 50+ REST APIs using Node.js and Express for efficient inventory management, boosting system responsiveness and efficiency.
- Crafted a React.js dashboard, utilizing Chart.js to visually represent key sales metrics such as daily sales volumes, top-selling products, and inventory levels, providing actionable insights to stakeholders for decision making.
- Established data pipelines in JavaScript, linking MongoDB and GCP storage for smooth data transfer, boosting accessibility of data across the network.
- Developed strategic cron jobs in Python to automate Java installations on server reboots, minimizing downtime and enhancing server reliability.
- Spearheaded the migration of database systems to PostgreSQL, implementing Sequelize as the ORM for seamless data integration and management.

PROJECTS

Confidence Estimation of a Model and Explainable AI | Python, Machine Learning, Google Colab   **Link**
- Employed CNN and Machine Learning techniques in Python to classify tumors via ResNet 50, enhancing breast cancer identification, improving accuracy by 60% through Leave-One-Out cross-validation on imbalanced datasets.

ENIMO - Energy Information and Monitoring | Javascript, React Js, MongoDB, IoT, ML   **Link**
- Built an IoT-based intelligent monitoring system using JavaScript and React, integrating Machine Learning to optimize industrial machinery maintenance, complemented by a robust MERN stack backend and frontend.

ESCOR – Exact Sciences OCR Portal | Javascript, React Js, Photoshop, ML   **Link**
- Designed and deployed a MERN Stack web application to digitize handwritten medical forms using OCR technology, creating over 500 synthetic dataset images in Photoshop and setting up secure API services on an NGINX Server.

Adani Ports Invoice Reconciliation System | React, Express, Firebase, Razorpay
- Developed an automated invoicing and payment system using React and Firebase, reducing administrative efforts by 50%, with an efficient admin dashboard and real-time updates via webhooks.

College ERP | React, Firebase, Firebase Functions, TypeScript   **Link**
- Implemented a comprehensive ERP system in React and TypeScript, managing over 1,000 stakeholders' information, reducing exam scheduling workload by 40% and automating data processes with Firebase Functions for precise exam seating.

Swachh-Bharat Waste Disposal Kiosk | Java, Maven, XML   **Link**
- Programmed a Java-based waste disposal kiosk, providing detailed disposal reports and generating unique coupon codes, enhancing local waste management efforts.

LEADERSHIP & AWARDS

GAAC UMBC Committee Member: Led efforts in organizing Meet and Confer conferences, conducting health insurance awareness sessions, and advocating for graduate assistants of UMBC.
Smart India Hackathon: Among 20,000 plus national contestants, won first place for creating an invoice reconciliation system.
IBM Hackathon: Honored with 'Best UI/UX' award by the Vice President of IBM, India for designing a reactive analytical dashboard using React Js and Material UI.
NASA Space Apps Challenge: Won the top honor for creating an innovative game environment in Unreal Engine to explore the future colonization of Mars.
Social Media Champ: Received the prestigious 'Social Media Champ' title at the Smart City Hackathon, presented by IT Secretary and IAS Officer Jayesh Ranjan, in recognition of exemplary contributions to social media engagement.

CERTIFICATIONS

Google Cloud Certified Associate Cloud Engineer   **Link**
Microsoft Certified AI Azure Fundamentals   **Link**
Microsoft Technology Associate Web Development Fundamentals   **Link**
Qlik Sense Business Analyst   **Link**

PUBLICATIONS

Co-authored the paper "Energy Conservation System" published in the International Journal of Recent Technology and Engineering (IJRTE). (Link)