

# KESHAHA RANGA DATTA RAJAVARAM

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## EDUCATION

<b>Arizona State University</b> M.Sc Computer Science	<i>Aug 2023 - Present</i> Overall GPA: 4.00/4.00
<b>Birla Institute of Technology and Science, Pilani, India</b> B.E Electronics and Instrumentation	<i>Aug 2019 - Jun 2023</i> Overall GPA: 8.35/10

## SKILLS

<b>Programming Languages</b>	Python, C/C++, Java, Javascript, HTML/CSS, PHP
<b>Frameworks, Databases &amp; OS</b>	Springboot, React, NodeJs, MySQL, PostgreSQL, MongoDB, ExpressJs, Linux
<b>Tools &amp; Technologies</b>	AWS, GCP, VertexAI PaLM API, Postman, Git, Docker, Kafka, Bitrix24, Firebase

## PROFESSIONAL EXPERIENCE

<b>Software Engineer Intern</b> <i>Truemates</i>	<i>Jun 2024 - Present</i> <i>Remote, USA</i>
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- Engineered and deployed backend modules using Express.js, scaling server-side applications to handle 20,000 concurrent users and reducing response time by 40%, enhancing overall user experience and system reliability.
- Managed deployment processes for two services on Google App Engine with Unix sockets, using CI/CD pipelines on GitHub to automate staging and production deployments.
- Orchestrated PostgreSQL database migrations, achieving 100% data integrity and reducing downtime by 40%, optimizing operational efficiency and ensuring robust platform performance.
- Integrated Firebase authentication for secure user sign-in and token management, with user data stored in Firestore.

<b>Data Science Intern</b> <i>HERE Technologies</i>	<i>Jan 2023 - Jun 2023</i> <i>Mumbai, India</i>
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- Analyzed data to pinpoint significant EV behavior locations from 3+ vast location datasets.
- Conducted data quality assurance and corrected inconsistencies, which resulted in a 25% improvement in data accuracy.
- Launched AWS RDS Postgres instances, conducted query performance analysis and optimization; improving response time by 35%.
- Simulated a comprehensive 6-month EV charging station dataset, showcasing data versatility and scalability.

<b>Interim Engineering Intern</b> <i>Qualcomm</i>	<i>May 2022 - Jul 2022</i> <i>Hyderabad, India</i>
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- Engineered an automated chipset design tracing and validation system, reducing manual validation time by 50%.
- Introduced a complex source-to-target path-tracing algorithm with pin path validation at every traversal step, increasing error detection efficiency by 40%.
- Crafted a GUI interface enabling rapid identification of errors and discrepancies, improving debugging speed by 35%.

<b>Intern</b> <i>Trikona Conskill Consulting LLP</i>	<i>May 2023 - Aug 2023</i> <i>Hyderabad, India</i>
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- Built a custom WordPress plugin using PHP, HTML/CSS, and AJAX for user management, erasing 100% of manual intervention.
- Managed a team of 5 engineers, ensuring bug identification, troubleshooting, and platform stability.
- Refactored codebase to enhance readability by adding comments and adhering to a consistent variable taxonomy.

## PROJECTS

**Facely, Course Project:** Built a face recognition flask app on AWS infrastructure, employing EC2 instances for the web tier to handle incoming requests and a scalable app tier to process them efficiently. Leveraged S3 buckets to store input and output data and SQS for communication between the web and app tiers, implementing scaling logic to manage concurrent requests effectively. Incorporated robust error-handling mechanisms to prevent duplicate request processing.

**Facely, Course Project:** Developed a NextJS application enabling users to upload video files for facial recognition. Implemented an AWS-based backend utilizing S3, Lambda, and custom face recognition models. Designed a serverless architecture that triggers Lambda functions to process videos, extract frames, and perform facial analysis. Demonstrated proficiency in full-stack development, cloud services integration, and machine learning implementation..

**MovieBooker, Personal Project:** Developed a Spring Boot backend for a movie booking system using a microservices architecture. Employed MySQL for data storage, Kafka for inter-service communication, Docker for containerization, AWS for deployment, and instantiated services for booking, payment, notification, etc.

**Smart Building Monitoring, Academic Project:** Designed and implemented a distributed database with advanced fragmentation and replication strategies; achieved 35% faster query processing and integrated distributed transactions, leveraging Python, PostgreSQL, and MongoDB tools.