

Results-driven Full Stack Engineer with 4+ years of experience designing and developing high-performance web applications. Available to start immediately. Open to Relocation.

## Technologies and Languages

- Languages: Java, Python, C/C++, Typescript, Kotlin, Rust, PHP
- Framework and Libraries: NextJS, Angular JS, React JS, JUnit, RESTful Web Services, Spring Boot, PyTorch, TensorFlow, JAX, GraphQL, Django, FastAPI.
- Databases: MySQL, NoSQL (MongoDB, Cassandra), DynamoDB, SQLite.
- DevOps and Containerization: Docker, Kubernetes, CI/CD Pipelines and automation frameworks, Jenkins, AWS DevOps (CloudWatch, S3 Bucket, DynamoDB, Lambda, SNS, SQS, DLQ, Cloud Formation, IAM Roles and Policies)
- Tools and Technologies: Git, Postman, Maven, Bash Scripting, Linux, Terraform, JIRA

## Work Experience

- Teaching Solved**, Tempe, AZ Aug 2024 – Present
- Full Stack Software Engineer** | NextJS, React, PostgreSQL, AWS Lambda, s3
- Developed a new web platform for language teachers to access free resources and create paid lessons and lesson plans using NextJS, leading to a **20% increase in customer satisfaction surveys and a 40% increase in customer retention**.
  - Implemented Redis cache to reduce database query latency by 65%, improving overall application response time from 2.5s to 850ms and supporting 3x higher concurrent user load.
  - Drove the adoption of agile development practices to streamline development processes, **resulting in a 25% increase in deployment frequency**.
- InduzBuy**, Bangalore, India May 2023 – Aug 2023
- Software Engineer Intern** | Laravel, EC2, BERT, Python, TensorFlow
- **Spearheaded the migration from core PHP to Laravel** to streamline the data models for improved modularity and maintainability, reducing feature lead time by 20%.
  - Built a BERT-based model using Python, hugging-face, and Django to standardize supplier catalog data with an accuracy of 95%, **reducing processing time by 60x (30 minutes to 30 seconds)**.
  - Took ownership of developing automated deployment strategies for our product on Amazon EC2 instances utilizing bash scripts, **reducing deployment errors by 40%**.
- ICICI Lombard GIC**, Bangalore, India Oct 2019 – Aug 2022
- Software Engineer** | Java, Springboot, Neo4j, Redis, SQL, ReactJS, React Native
- Led the development of a new vehicle insurance renewal portal, allowing for self-service renewals.
  - Collaborated with product managers and designers to develop a performant and accessible React frontend with lazy loading and i18n localization, **resulting in page load times of under 10ms**.
  - **Migrated a monolith application to scalable microservices** built using Java and Springboot, **reducing AWS costs by 30% by implementing scale-to-zero auto-scalers**.
  - Created a GraphDB-based decision tree using neo4j to compute insurance premium components, improving load times by 40%.
  - Ideated and built a mobile CRM app using React-Native, allowing Sales Representatives to **work remotely during COVID lockdowns, reducing revenue lost by 60%**.
- Autoninja**, Bangalore, India Jan 2019 – Oct 2019
- Software Developer** | Java, Springboot, ELK stack, Sentry
- Designed and implemented a **real-time car delivery tracking system** using Java and Springboot, allowing users to track car deliveries on their phones – resulting in a **20% decrease in support call volume**.
  - Led the development of internal dashboards using ELK-stack (Elastic Search, Logstash, Kibana) to catch errors in config files, resulting in **70% fewer critical errors in production**.
  - Coordinated cross-functional initiatives with engineering, product, and operations teams to triage customer issues, leading to major changes to customer support processes, **resulting in a 15% speedup in ticket resolution time**.

## Education and Certifications

- Masters in Computer Science, Arizona State University, Tempe. 2022 – 2024
- B.Sc. Mechanical Eng. with Minors in Computer Science, PES University, Bangalore, India. 2015 – 2019

## Projects

- TCR-Epitope Binding Affinity Prediction** | CNN, Encoder-decoder networks, Python, TensorFlow Sep 2023
- Designed a hybrid CNN-encoder-decoder model using catEMLo embeddings to predict TCR-epitope binding affinity, achieving 81% accuracy on a dataset of 500k+ antigen sequences.
  - Improved model robustness by refining training parameters and loss functions, boosting recall by 8% to enhance detection of low-affinity interactions critical for immunotherapy research.
- Scalable Data Processing Pipeline** | Apache Spark, Kubernetes, Scala, Hadoop, neo4j Jan 2023
- Engineered a scalable data pipeline using Apache Spark and Hadoop to process 10M+ records from NYC OpenTaxi dataset, deploying Kubernetes for automated resource orchestration and 20% compute cost optimization while ensuring sub-second latency.
  - Spearheaded advanced analytics in Scala/Spark, including PageRank algorithms and hotspot analysis, to identify high-traffic zones and model trip patterns in Neo4j.