

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
- 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
- Streaming and Big Data: Apache Kafka, Spark, Hadoop, Flink

Work Experience

- Teaching Solved**, Tempe, AZ Aug 2024 – Present
Software Engineer | NextJS, PostgreSQL, AWS Lambda, s3, Edge Network
- 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, GPT-3, Python
- **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 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

- Realtime Video and Image Filter** | Python, OpenCV, FastAPI, SciPy, Numpy Dec 2023
Github: github.com/adhipk/ascii-art
- Created Real-time ASCII-art and flow-based difference of Gaussian filters using Python, OpenCV, and Scipy.
 - Developed a video filter using FastAPI MJPEG Stream, and OBS allowing users to apply filters on Zoom and Teams calls.
- LibriCasts** | Python, HTMX, Github Gists, Redis Jul 2023
Github: github.com/adhipk/libricasts | *Demo:* <https://libricasts.vercel.app>
- Created a tool using Python, flask, and HTMX to automate importing audiobook RSS feeds from librivox.org to PocketCasts.
 - Implemented a Redis cache to store processed URLs to prevent duplicates.