Kartik Hakim

✉ hakimkartik@gmail.com 📞 (213) 354-2930 📍 Los Angeles, CA
in linkedin.com/in/kartik-hakim ⭘ Repo-1 ⭘ Repo-2

SUMMARY

As a software engineer with 5+ years of experience across Amazon, Licious Pvt Ltd, and Sprinklr Pvt Ltd, I've developed a robust skill set in automating workflows, optimizing databases, and developing responsive user interfaces, leading to significant improvements in operational efficiency and user satisfaction. My technical proficiency spans a wide range of programming languages, web frameworks, and cloud technologies, enabling me to design and implement complex solutions that drive business growth and enhance user experience.

EXPERIENCE

Easley Dunn Productions Inc - Backend Engineer   **Los Angeles, CA** 07/2024 - Present
- Responsible for managing deployment pipelines and game level-designs.
- Designing and implementing new analytics for enhancing user engagement.

Amazon - Software Development Engineer Intern   **Irvine, CA** 05/2023 - 08/2023
- Collaborated with the customer management team to design an automated Redshift query execution workflow.
- Implemented the designed workflow using AWS StepFunctions to streamline database operations for user campaign optimizations.
- Developed and deployed an automated workflow using AWS CDK, enabling dynamic query generation and execution in under 30 seconds, enhancing system responsiveness.
- Leveraged deep knowledge of database management and SQL optimization to reduce Redshift database query times, resulting in a 15% improvement in page load speeds.
- Implemented the proposed solution using AWS StepFunctions, significantly improving the efficiency and reliability of database operations.

Licious Pvt Ltd - Software Development Engineer 2   **Bengaluru, KA** 08/2021 - 07/2022
- Streamlined the user experience through targeted improvements in interface design and authentication processes.
- Utilized VueJS to design and implement responsive user interfaces, resulting in a 15% boost in user satisfaction scores by enhancing usability and aesthetics.
- Spearheaded a small, agile team in developing an efficient in-house user authentication gateway using Spring Security, achieving a 25% reduction in login time through optimized security processes.
- Designed and deployed a user-segmentation service using AWS Lambda, Firebase, and Spring Batch, leading to a 20% increase in customer engagement by tailoring user experiences.
- Applied a combination of front-end development expertise and backend security measures to improve overall user experience and system efficiency significantly.

Sprinklr Pvt Ltd - Software Engineer   **Bengaluru, KA** 07/2017 - 08/2021
- Developed and deployed automation APIs for efficient data migration, achieving a 45% increase in speed when migrating from Solr to Elasticsearch and Cassandra to Scylla databases, leveraging my expertise in database technologies and scripting on Unix based systems (CentOS, AmazonOS, Ubuntu).
- Implemented a high-availability Redis architecture with Sentinel, resulting in enhanced system reliability and direct monthly profits of $3k through improved data processing capabilities.
- Engineered Python modules and improved system architecture to facilitate the dynamic provisioning of Jenkins slaves in Azure, generating $9k in monthly profits by optimizing resource utilization and reducing overhead costs.
- Designed and executed a payment gateway solution using a microservices architecture in Node.js, enhancing API response times by 25% and decreasing server load by 30%, demonstrating my proficiency in backend development and system optimization.

PROJECTS

Vulnerability Scanning Tool (Python, Django, Docker API, Clair API, Trivy API, SNS, VueJS, Bootstrap, CSS, HTML)
- Developed and implemented a full-stack application having REST APIs using Django, targeting the scanning of deployed Docker images for vulnerabilities, which improved production security by identifying and mitigating known threats more efficiently.
- Engineered a data visualization dashboard that provides detailed insights into vulnerabilities, enabling enhanced security analysis and strategic response planning.
- Created functionality within the dashboard for exporting vulnerability details into CSV format, facilitating streamlined reporting and documentation processes.
- Integrated an email sharing feature into the dashboard, ensuring timely and secure dissemination of critical vulnerability information to registered stakeholders, enhancing communication and collaborative security efforts.
- Utilized Django and Docker technologies to design and deploy a scalable RESTful API for scanning deployed images in production environments, significantly improving the detection and mitigation process of known vulnerabilities.
- Applied expertise in frontend and backend development to create a visualization dashboard tool, offering detailed views of vulnerabilities, which improved stakeholder understanding and decision-making regarding security measures.
- Implemented a CSV generation feature within the dashboard, simplifying the process of reporting and analyzing vulnerabilities, thereby optimizing the workflow for security teams and stakeholders for banking clients.

- Enhanced stakeholder engagement and response efficiency by developing an email-sharing option for the dashboard, ensuring that critical vulnerability information is promptly and securely communicated to relevant parties.

User Authentication Service (Spring Batch, Spring Security, SailsJS, ExpressJS, OAuth, GCP, RBAC, JWTs)
- Designed and developed hybrid user authentication web services which used JSON Web Token (JWTs) along with Google OAuth.
- Implemented a decentralized architecture to store and process user and employee roles and permissions which were used to authenticate clients as well as employees accessing public and private services using Spring Batch along with MySQL and MongoDB.
- Using Spring Batch implemented periodic updates of user roles and permissions submitted by different teams after they have been verified by respective stakeholders.
- Implemented a centralized logging feature to keep track of changes to user permissions and pushed all actions to InfluxDB for easy debugging.
- Added integrations to core codebase in SailsJS and ExpressJS for all internal platforms to use the new authentication service and work efficiently.

Split Screen Runner (Unity, C#, TextMeshPro, Animations, Particle Effects, Post Processing, Plotly Dash)
- Led a team of 4 to design and develop a 2D platformer game with inversion control as core mechanic, using Unity Play and deployed using GitHub Pages and Actions.
- Implemented the user analytics and generated hypothesis to enhance user engagement and experience using Flask based REST APIs and created plots using plotly.

Weenix Kernel (Operating Systems, C, Unix, CLI)
- Implemented the different aspects of Unix operating systems like file system, paging, memory allocation, user security etc. while developing 'Weenix', a lightweight OS kernel.

SKILLS
- **Programming Languages**: C/C++, JavaScript, Java, Python, Rust, Go, Bash, Perl, Groovy, C#, PHP, TypeScript, Angular, Ruby, Kotlin, R, CUDA, D3.js
- **Web Frameworks**: ReactJS, Vue JS, NodeJS, Django, Flask, Spring Boot, Hibernate, Mojolicious, Laravel, SailsJS, ExpressJS, Next.js, JUnit, Mockito, JMeter, Ruby on Rails
- **Cloud Technologies**: AWS (EC2, S3, EKS, CloudFront, Fargate, Lambda, StepFunction, SNS, ElastiCache, Redshift, RDS, CloudFormation, DynamoDB, CloudWatch, ECS), Azure, GCP (Google Cloud Platform), BigQuery , Databricks
- **Infrastructure Technologies**: Ansible, Kubernetes (K8s), Docker, Jenkins, Gitlab, Gradle, Maven, PostgreSQL, Graylog, Sensu, Prometheus, Terraform, Apache Spark, Hadoop, Apache Kafka, Apache Hive, Parquet, Vault, Helm, gRPC, Apache Airflow, LDAP
- **Concepts**: Web Services, Big Data, DNS, Distributed System/Computing, Operating System, Virtual Memory, Cache Memory, Encryption, Decryption, Neural Networks, Database Normalization, Agile Development Methodology, Cloud Infrastructure, Cloud Computing, VPN, CDN, Software Development LifeCycle (SDLC), Continuous Integration Continuous Development (CI/CD), Full Stack Development, Containerization, Git Version Control, TCP/IP, HTTP, Proxies, Load Balancers, Product Engineering, Product Management,, Linux Systems, DevOps, Object Oriented Programming (OOPs), Design Patterns, Design Reviews, Functional Programming Experiments, SRE, System Design, Platform Engineering, UI/UX, Server Side Development, Software Design,CRM, Scalability, E-commerce, Algorithms, NoSQL, Data Structures, SaaS, ETL, Data Architecture, JVM, Service-Oriented Architecture, Fintech, Data Storage, Web Applications, Data Analytics, Data Science, Technical Documentation, Technical Design, Infrastructure as code, Computer Vision, Data Engineering, Quality Controls, FastAPI, Serverless Computation, GraphQL, Digital Products, Unit Tests, Enterprise Software, Enterprise Web Applications, SVN, Platform Tooling, Asynchronous Programming, Access Management, Features Development, Technical Expertise, Software Engineering Patterns, Conda, Numpy, Web Technologies, Quality Assurance (QA), SSL, TLS, JIRA, Service Level Agreements (SLA), Relational Databases, Messaging Queues, Internal tools, Caching
- **Interpersonal Skills**: Product Development, Product Design, Project Management, Leadership, Collaboration, Code Review, Teamwork, Problem Solving, Excellent Verbal and Written Communication Skills, Adaptability, Flexible, Collaborative, Self-Driven, Detail-Oriented, Highly Motivated, Cross-Functional Team, Reliability, Innovative, Troubleshooting, Accountability, Communication Skills, Mentoring, Resilient, Research Oriented, Pragmatic, Customer Experience, Fast Paced, Analytical, Critical Thinking, Innovation, Constructive Feedback, Highly Competitive, Industry Trends, Strong Technical Skill, Logistics and Event Planning, Fast Paced Environment, Process Improvement, User Research, Team Building, Mentorship, Agility

EDUCATION & CERTIFICATIONS
University of Southern California - MS, Computer Science
BMS College of Engineering - BE, Computer Science
- RU202: Redis Streams (link)
- M103: MongoDb Basic Cluster Administration (link)
- Natural Language Processing (NLP) with Python (link)
- Hands-on PyTorch Machine Learning (link)
- gRPC in Python (link)
- Building a Recommendation System with Python Machine Learning & AI (link)
- Learning React.js (link)