

KUSHAGRA BAINSLA

kushagra.bainsla@sjsu.edu | +1 (408) 387-4802 | [linkedin.com/in/kushagrabainsla/](https://www.linkedin.com/in/kushagrabainsla/) | kushagrabainsla.github.io/ | San Jose, CA

EDUCATION

Master of Science in Computer Science, San Jose State University

Aug 2025 – May 2027

Coursework: Database Systems Principles, Distributed Systems, Cloud Computing, Parallel Computing

Bachelor of Technology in Computer Science & Engineering, Kurukshetra University

Aug 2018 – Jul 2022

Coursework: Data Structures and Algorithms, Advanced Algorithms, DBMS, Object Oriented Programming (OOP Designs & Patterns), Computer Networks, Operating Systems, Agile, Software Development Lifecycle (SDLC)

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, SQL, C, C++ , HTML, CSS, Shell scripting

Framework & Libraries: Django, DRF, Flask, Node, React, React Native, Angular, Express, Flutter, GraphQL, Serverless Framework

Databases: PostgreSQL, SQLite, MongoDB, Redis, Apache Pinot, Elasticsearch, DynamoDB

Tools & Cloud: Git, Docker, Datadog, AWS (VPC, SQS, SNS, SES, EBS, S3, EC2, ECR, RDS, Lambda, Redshift, CloudFormation, Amplify, API Gateway, Cognito), Celery, GitHub Actions, Travis, Kubernetes, Stripe, Auth0, Nginx, Firebase, Postman

WORK EXPERIENCE

Uniqode

Senior Software Engineer

Aug 2024 – Jun 2025

- Led the development and maintenance of backend systems (**monotonic server, microservices, and cloud-native components**) for our **\$2M ARR Digital Business Card platform**, achieving **99.99% uptime** with high scalability, performance, and fault-tolerance.
- Architected an **event-driven email automation system** that sent configurable follow-up emails (custom content, sender identity, OAuth 2.0, delivery delays), processing thousands of events daily with **99.9% reliability and driving 36% engagement growth**.
- Devised and implemented a **real-time adaptive notification engine** processing **1M+ cross-platform notifications** daily (Android, iOS/APNs, email, in-app) with intelligent throttling and prioritization logic, ensuring timely delivery and reducing opt-outs by **22%**.
- Optimized logging infrastructure by **eliminating 4.2B** unnecessary logs/year through log-level tuning and filtering, reducing I/O overhead and **saving 300+ EC2** compute hours annually, while cutting Datadog **monitoring costs by \$12K/year**.

Software Engineer

Aug 2022 – Jul 2024

- Spearheaded the backend migration of **analytics infrastructure** from Elasticsearch to Apache Pinot, optimizing real-time data querying and **reducing P95 query latency by 97.6% (25s to 600ms)**, while cutting **operational costs by 30%**.
- Constructed a high-throughput **email reporting pipeline** to generate and distribute weekly analytics for **200K+ products**, leveraging asynchronous processing to boost engagement and product discovery.
- Collaborated with customer success, product managers, sales, and engineering teams to deliver **integrations with Azure AD and Salesforce CRM**, contributing to **\$300K+** in annual enterprise revenue.
- Engineered a **flexible incentive system** integrated with Stripe to apply and expire usage-based rewards (e.g., feature unlocks, limits increase, plan upgrades) over billing cycles, **cutting churn by 34%** via automated, targeted retention strategies.
- Enhanced scalability and **cut public API latency by 42%** through query optimization and replacing Django defaults with custom, high-performance utilities, bringing **P95 latency consistently under 120ms**.
- Mentored **3 backend interns**, led **70+ interviews**, and improved documentation to streamline onboarding and knowledge transfer.

Software Engineering Intern

Feb 2022 – Jul 2022

- Developed RESTful APIs and optimized database workflows for bulk operations (creation, export, soft delete, labeling), leveraging asynchronous processing, batched inserts, and query tuning, **reducing processing latency by 40% and bulk action time by 12x**.
- Implemented an **IP threat monitoring service** to detect Tor, VPN, and bot activity, enhancing analytics security by enabling real-time threat detection with minimal performance impact.

LetsEndorse Development

Summer Intern

May 2021 – Jul 2021

- Built modular, reusable dashboard components in React.js, improving UI performance and KPI/metric tracking time from **90m to 5m**.
- Crafted **15+ React Native** app screens, **optimizing user interfaces and workflows** to double delivery partner efficiency.

PROJECTS

CuriosityAI @CalHacks 12.0: Designed a **Generative AI discovery engine** using **vector embeddings, ChromaDB, Fetch.ai agents, and dimensionality reduction** to visualize sparse research clusters in 3D and auto-suggest novel, feasible research topics with starter code.

Sentinel: Built an **email marketing/analytics tool** capable of handling **100K+ emails/month** at under **\$50 infrastructure cost**. Designed bulk email delivery, real-time event ingestion, and engagement tracking powered by real-time analytics pipelines.

Build-flask-app: Created an **open-source CLI tool** to automate Flask project scaffolding, including WebSocket integration, database initialization, and testing frameworks. It **reduced developer onboarding time from hours to minutes** with consistent, production-ready templates and has **achieved 41K+ downloads** on PyPI, validating strong community demand and real-world impact.

ACHIEVEMENTS

- Secured Rank **292** out of **100K+** participants in CodeKaze.
- Secured Global Rank **214** out of **18.5K**, India Rank **35** in LeetCode Biweekly Contest 73. (**Top 1.1%**)
- Secured a rank in the **top 2.8%** out of **28.9K** participants in ScalerCodeX 2.0.
- Earned the 2021 LeetCode Badge (**Top 0.12% globally**); peak rating **1963 (Knight)**, ranked in the **Top 600** in India.