

# KUSHAGRA BAINSLA

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## Education

### San José State University

Master of Science in Computer Science

Aug 2025 – May 2027 (Expected)

San José, CA, USA

### Kurukshetra University

Bachelor of Technology in Computer Science & Engineering

Aug 2018 – Jul 2022

India

Relevant Coursework: Data Structures and Algorithms, Advanced Algorithms, DBMS, OOP, Computer Networks, Operating Systems

## Technical Skills

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

**Framework & Libraries:** Django, DRF, Flask, React, React Native, Angular, Express, GraphQL, Playwright

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

**Tools & Cloud:** Git, Docker, Datadog, AWS (SQS, SES, EBS, S3, EC2, ECR, RDS, Lambda, Redshift, CloudFormation), Celery, Serverless Framework, GitHub Actions, LaunchDarkly, Amplitude, Stripe, Sentry, Auth0, Nginx, Firebase, Froala, Hasura, Postman

## Work Experience

### Uniqode

Senior Software Engineer

Aug 2024 – Jun 2025

- Engineered and maintained backend systems for a **\$2 Million ARR** Digital Business Card platform, achieving **99.99% uptime** while ensuring high performance, fault tolerance, and scalability.
- Built a scalable, event-driven email automation system using Celery and Gmail API (OAuth 2.0), enabling users to send delayed, personalized follow-ups from their own accounts, boosting engagement rates by **36%** via human-like communication.
- Designed and implemented an adaptive notification engine using Celery and Python, improving message relevance by **40%** by dynamically selecting optimal delivery modes (immediate, digest, auto) based on real-time user engagement patterns.
- Designed and constructed a secure, scalable public event ingestion pipeline for Amplitude with request validation and transformation logic, reducing analytics data loss by **97%** and improving data integrity across client platforms.
- Optimized logging infrastructure by eliminating **4.2 Billion** 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

- 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**.
- Contributed to 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.
- Developed 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.
- Accelerated bulk upload (creation) and labeling workflows for **10K+** records by **12x** with optimized database operations, including batched inserts and query tuning, significantly enhancing scalability and throughput.
- Improved engineering onboarding by mentoring **3 backend interns**, reducing ramp-up time by **30%**. Conducted **70+** technical interviews across all levels, and updated official documentation to support faster knowledge transfer and consistency.

Software Engineering Intern

Feb 2022 – Jul 2022

- Developed RESTful APIs for bulk operations, including CSV export and soft delete, optimizing data processing and reducing bulk action completion time by **40%** through efficient query handling and asynchronous processing.
- Implemented an IP threat monitoring service to detect Tor, VPN, and bot activity, enhancing analytics security and enabling real-time threat detection with minimal performance impact.
- Reduced technical debt by resolving legacy bugs and achieving **93%** average test coverage through comprehensive API unit testing.

### LetsEndorse Development

Summer Intern

May 2021 – Jul 2021

- Built modular dashboard components in React.js, reducing time to track KPIs and business metrics by over **10x**.
- Crafted **15+** screens for a React Native delivery partner app, optimizing user interfaces and workflows to double user efficiency and significantly enhance the overall delivery partner experience.

## Projects

**Sentinel:** Built an internal email tracking system using AWS SES, SQS, and tracking pixels with real-time, decoupled processing; enabled marketing teams to make data-driven content decisions and improved email engagement metrics by **40%**.

**Build-flask-app:** Created an open-source CLI tool that automates the setup of Flask applications, integrates WebSocket support, and initializes databases. The tool has gained **10,000+** downloads on PyPI, streamlining project setup and improving development efficiency.

## Achievements

- Secured Rank **292** out of **1 Lakh+** participants in CodeKaze.
- Secured Global Rank **214** out of **18,529**, India Rank **35** in LeetCode Biweekly Contest 73. (**Top 1.1%**)
- Secured a rank in the **top 2.8%** out of **28,991** 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.