

CADE BULLEN

Software Engineer

Edison, New Jersey | cadeblewis@gmail.com | [LinkedIn](#) | [GitHub](#)

WORK EXPERIENCE:

The Estée Lauder Companies

Software Engineering Intern | June – August 2025

- Built an internal admin dashboard used by 15+ team members, that eliminated manual Oracle database edits and reduced AI configuration time by 50%.
- Designed RESTful APIs in Spring Boot with robust input validation, ensuring error free configurations are deployed to the live AI agent.
- Collaborated with my Product Manager and other devs to define configuration schemas, translating complex AI requirements into an intuitive UI used for daily operations.

RELEVANT PROJECTS:

Voice Transcription Bot

Developer | Jan 2026 – Present | [GitHub](#)

- Developed a high-performance Discord bot capable of recording and transcribing multi-user voice channels with near-human accuracy using the Whisper Large-v3 model.
- Engineered a robust audio pipeline that captures raw PCM streams, converts them to WAV via FFmpeg, and handles multiple speakers concurrently.
- Optimized inference speed by implementing Faster Whisper with NVIDIA CUDA acceleration and float16 quantization.
- Tech Stack: Python, Discord API, Faster-Whisper (OpenAI), CUDA, FFmpeg, AsyncIO

Distributed Data Cluster (HBase & HDFS)

Developer | AWS EC2 & Distributed Systems | Oct – Dec 2025 | [GitHub](#)

- Architected a multi-node distributed cluster on AWS EC2 using HBase and HDFS, implementing a column schema to provide fast latency lookups for a large-scale system.
- Eliminated single points of failure by using ZooKeeper to manage cluster health and configured HDFS to store redundant data copies, ensuring the system remains operational if a node crashes.
- Enhanced system stability to prevent disk exhaustion and resolving complex infrastructure failures like znode corruption and HDFS Safe Mode lockups.
- Tech Stack: AWS (EC2), Apache HBase, HDFS, ZooKeeper, Linux (Ubuntu), Java, XML

RecordCrate

Lead Developer | Student Startup | Sep – Dec 2025 | [Link](#)

- Architected a full-stack social platform using React and Node.js, synchronizing user review data in MongoDB with music metadata via the Spotify Web API.
- Implemented an optimized search interface with debounced API requests, allowing users to query millions of tracks and albums with seamless client-side state management.
- Developed an AI-driven recommendation engine using the Gemini API, engineering custom prompts that analyze user sentiment in reviews to generate personalized 'Daily Album' suggestions.
- Tech Stack: React, TypeScript, Node.js, MongoDB

EDUCATION:

2021 – May 2026 | New Jersey Institute of Technology

Bachelor of Computer Science

SKILLS:

- Languages: Java, C/C++, JavaScript, TypeScript, Python, PHP, SQL, HTML/CSS
- Frameworks: Spring Boot, Spring Data JPA, React, Next.js, Express, React Query
- Databases: HBase, HDFS, Redis, MySQL, Oracle, MongoDB, PostgreSQL
- Cloud: AWS EC2, Azure, Firebase, Google Cloud Platform
- Developer Tools: Docker, Git, Maven, Jira, Postman, ZooKeeper, Linux