

# Blake Sanie

Software Engineer Chicago, IL blake@sanie.com blakesanie.com (650) 924-5614

## Experience

### Capital One Financial

**Senior Software Engineer**, Core Processing Abstraction Layer (Card Accounts)

Jan 2025 - Present

- Tripled streaming throughput by socializing Kafka & GoLang concurrency patterns, yielding landmark framework contribution.
- Emerged as SME of Change Data Capture, applying in-depth DynamoDB & Lambda grasp toward reconciliation data lake archive.
- Solidified platform reliability through serverless retry layer, circuit breaker mechanism, seamless emulation for component tests.
- Bridged architectural gaps with Transactions teams by pioneering code generation utility, hosting weekly knowledge transfers.

**Associate Software Engineer**, Core Processing Abstraction Layer (Card Accounts)

Feb 2024 - Dec 2024

- Drove standardized monitoring workflow consensus among senior leadership and architects, following high-severity incident.
- Uncovered 3K account-level attribute discrepancies and updated code-level derivations, amidst source-of-record migration.
- Exceeded team scope by inner-sourcing critical API features, advising interns, fabricating domain-knowledge chrome extension.

### College of Computing, Georgia Institute of Technology

**Head Graduate Teaching Assistant**, Artificial Intelligence (CS 3600) with Dr. Mark Riedl, Dr. Thad Starner

Aug 2021 - Dec 2023

- Facilitated hybrid lectures for 1700+ students by providing first-hand presentation aid to professor, coordinating specialized content among staff, preparing stimulating exercises, moderating student discussions, and integrating weekly feedback.
- Eliminated 90% of plagiarism by adopting project watermarking initiative and Stanford's MOSS tool alongside AI research lab

## Education

### Georgia Institute of Technology

Aug 2019 - Dec 2024

**M.S. Machine Learning** (4.0/4 GPA), **B.S. Computer Science** (4.0/4 GPA)

## Skills & Proficiencies

**Business Skills:** Leadership, critical thinking, production support, cost optimization, dependency coordination, French fluency

**Technical Skills:** Advanced AWS (Fargate, Lambda, DynamoDB), monitoring (CloudWatch, NewRelic, Splunk), Machine Learning (PyTorch, NumPy, Spark), Full Stack (GoLang, JavaScript, React.js), Streaming (Kafka, SQS, gRPC), Databases (SQL, Redis, Firebase)

## Projects

**Learned Early Exit Network (LeeNet)**, Georgia Institute of Technology

- A novel Deep Learning architecture with dynamic exiting at intermediate layers based on self-learned confidence thresholds.
- Awarded project of the year in Georgia Tech's graduate Big Data course, highlighting the demonstrated potential in model efficiency.

**Distal Radius Object Identification (DROID)**, Emory Department of Orthopedics

- Realtime iOS wrist implant manufacturer identification from mere x-ray imaging, aiming to reduce emergency extraction complications.
- Presented to top-industry surgeons to align use cases and unravel underlying K-means, PCA, RANSAC, transfer learning methods.

## Certifications

**AWS Solutions Architect, Associate**, Amazon Web Services

- Deep intuition towards implementing scalable, available, durable, resilient, cost-effective cloud initiatives with 50+ AWS services

**Code Secure Software Engineer (CSSE)**, Capital One

- Defense against Code Injection, XSS, Access Control, and Session Handling vulnerabilities at both service and system-level

## Interests

- Ironman triathlon, French cuisine, landscape photography, chess, blues guitar, hydroponic gardening, graphic design