

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