

# Blake Sanie

## Software Engineer

blake@sanie.com 650-924-5614

blakesanie.com in/blakesanie

## Education

### Georgia Inst. of Technology

*M.S. Computer Science*, Dec 23

- 4.0/4 GPA
- Machine Learning focus

*B.S. Computer Science*, Dec 22

- 4.0/4 GPA, Summa Cum Laude

## Languages

Python	JavaScript	Java
SQL	HTML & CSS	C & C++

## Technologies

PyTorch	AWS & GCP	Docker
Redis	MongoDB	React.js
Spark	Tensorflow	Selenium
Jupyter	Databricks	Firebase

## Technical Skills

Git	Data Structures
AI & ML	Statistical Analysis
UI & UX	Algorithm Design
Jira	Distributed Systems
Slack	Cloud Architecture
Linux	Database Design
Jetbrains	Network Analysis
Figma	CI/CD Pipelines

## Business Skills

French Fluency (Verbal & Written)

Farsi Language (Conversational)

Effective Leadership

Critical Thinking

Agile Methodology

Conflict Resolution

## Experience

### College of Computing, Georgia Tech - Atlanta, GA

08/21

#### *Head Graduate Teaching Assistant, Artificial Intelligence*

- Present

- Managed lectures of 1700+ students by coordinating specialized content among staff, preparing stimulating exercises, moderating student discussions, and integrating weekly feedback
- Eliminated 90% of historical plagiarism by restructuring projects with file watermarks, anomaly-detecting submission platforms, and staff-facing interfaces beyond Stanford's MOSS tool

### Capital One - New York, NY

06/23

#### *Software Engineering Intern, Commercial Lending Tech*

- 08/23

- Informed hundred-million-dollar loan decisions by achieving 80x data sync speedup between decentralized underwriter databases and enterprise data lake with serverless rearchitecture
- Evolved data sync mechanism into debut enterprise platform with dataset registry, native data streams, background sync validation, monitoring, and self-onboarding
- Enforced sponsor assignment compliance by redesigning validation logic integrated across Angular.js microsite, C# API service, and PostgreSQL database

### Capital One - Chicago, IL

06/22

#### *Software Engineering Intern, Card Data Engineering & Analytics*

- 08/22

- Amplified petabyte-scale sensitive data detection accuracy from 50% to 99% with transformer networks and feature-dense NLP tokenization schemes
- Established continuous training and inference pipeline between AWS EMR, S3, and Fargate to strengthen model coverage, adaptability, and automation

### Schonfeld Strategic Advisors - New York, NY

06/21

#### *Software Engineering Intern, Treasury Technology*

- 08/21

- Oversaw creation of broker simulation microservice enabling end-to-end tests for multibillion-dollar short allocation system with > 150K daily trade volume
- Coordinated across firms to integrate MS, GS, and JPM locates services
- Delivered React-based admin dashboards with overriding broker controls

## Projects

### Sanie Quantitative Research - Personal Venture

- Pioneered ML stock growth, risk, momentum, and pattern evaluation methods
- Built highly-interactable insight screener with custom criteria engine
- Developed by-your-side stock investment assistant via Chrome extension
- Based on self-devised autonomous strategy with 34% return, 50% risk of S&P

### Distal Radius Object Identification - Emory Dept. of Orthopedics

- Prototyped method to reduce emergency wrist implant extraction complications by inferring implant manufacturer from an x-ray scan, presenting the necessary technique guide.
- Applied K-means clustering, PCA, and RANSAC feature matching to form preprocessing pipeline
- Adapted YoloNetV3 for robust object classification with focal loss for class imbalance
- Resolved small dataset limitations with model-embedded image augmentation
- Presented to top-industry surgeons to align use cases, feature scope, and vision

## Certifications

### AWS Certified Cloud Practitioner - Amazon Web Services

- Critical knowledge of implementing best-practice cloud initiatives with 50+ AWS services
- Hands-on experience with EC2, S3, SNS, EMR, RDS, Lambda, Fargate, Route 53, DynamoDB

### Certified Secure Software Engineer (CSSE) - Capital One

- Defense against Code Injection, XSS, Access Control, and Session Handling vulnerabilities