SIDDHARTH JAIN

Seeking Software Engineer Roles for 2026

Email: *sj99@illinois.edu* | **Phone:** +1 (602) 596-7491

LinkedIn: */in/sjain166* | **GitHub:** */sjain166*

EDUCATION

University of Illinois Urbana-Champaign (UIUC) — Expected: December 2025
Master of Computer Science

- Courses Taken: Computer Security, Deep Learning For Computer Vision, Advanced Distributed Computing, Cloud Networking

Arizona State University (ASU) — August 2020 – May 2024
Bachelor of Science in Computer Science — *4.00 GPA*

- Courses Taken: Distributed Systems, Computer Networks, Operating Systems, Software Design Principles, Digital Design

WORK EXPERIENCE

Software Engineer Intern — May 2025 – Current
PayPal Inc. — *Scottsdale, AZ*

- Engineering **Spring Batch** pipeline to automate reconciliation of over **6.5M+** failed financial events, reducing manual **SQL** fixes.
- Implementing event requeue logic based on lifecycle state transitions and timestamps to ensure correctness and idempotency at scale.
- Troubleshooting **QA failures** using distributed log analysis and event state inspection; validating batch behavior across systems.
- Writing unit and integrated tests using **JUnit, Mockito, and WireMock** for end-to-end validation; building observability dashboards.

Cloud Engineer — January 2025 – April 2025
Nexus — *Remote, USA*

- Defined **AWS architecture** for multi-user coding platform, enabling CI/CD, **ECS scaling**, and region-based production readiness.
- Reduced deployment time by 90% with **3 GitHub → CodeBuild CI/CD pipelines** for frontend, backend, and infrastructure.
- Refactored EC2-based stack to serverless AWS **(ECS, EFS, S3, Route53, DynamoDB)** with CDK, reducing infra overhead by 30%.
- Delivered production-ready deployment in 6 weeks by aligning infra roadmap with dev workflows and cross-team priorities.

Software Development Engineer Intern — May 2023 – August 2023
Amazon.com — *San Diego, CA*

- Built automated orchestration with **Lambda, SQS, Java & TypeScript** to back-fill a million records, saving developer time by 99%.
- Architected 1-click reusable cloud stack using **AWS:CDK** to perform batching for downstream services with rate-limited TPS.
- Constructed robust error handling mechanism with **automated retries** for transient errors reducing failure, ensuring 100% data integrity.
- Tested system end-to-end using JUnit5 achieving 100% code coverage. Deployed real-time monitoring dashboard using **CloudWatch**.

PROJECTS

360Torrent | Distributed Systems Engineer | *Python (asyncio), Ansible, tmux, P2P Systems, BitTorrent*

- Developed a **Python-based P2P CDN** for 360° video, reducing download latency by 42% via geo-aware chunk prioritization.
- Designed churn-resilient downloader using **asyncio**, adaptive health checks, and rarest-first strategy; improved reliability by 35%.
- Deployed system on 20 VMs using **tmux, tc, and Ansible,** simulating 100+ clients with region-aware network conditions.
- Integrated popularity matrix at tracker; pre-seeded hot chunks across peers, cutting startup latency by 28%.

PitchPal | ML Engineer | *PyTorch, Torchvision, OpenCV, CNN, MediaPipe*

- Designed and implemented an **AI-powered multimodal analysis system** that evaluates elevator pitches using speech and facial cues.
- Built a nervousness classification model using **EfficientNet-B0** trained on custom-labeled facial expressions, achieving **80% accuracy.**
- Integrated eye contact detection using a **pre-trained CNN-based** facial gaze tracker, to enhance nervousness classification.
- Developed a fully automated local inference pipeline for video analysis with **PyTorch, OpenCV, dlib, and MediaPipe.**

Study Buddy | Full-Stack iOS Developer | *SwiftUI, Firebase, CoreData, Authentication*

- Engineered an **iOS app** leveraging **MVVM** to facilitate collaboration by providing a platform to search, create, and join study sessions.
- Established **Firebase-Auth**, offering users sign-in options via Email, Google, and Apple for enhanced authentication flexibility.
- Implemented local **(CoreData)** and cloud **(Firestore)** data storage, ensuring seamless data retention and optimized retrieval processes.
- Integrated **MapKit** to allow users to set study session locations. Streamlined navigation process, ensuring accuracy within a 10m range.

SKILLS

Languages:	Java, C/C++, Python, C#, TypeScript
AI/ML Frameworks:	PyTorch, Torchvision, OpenCV, MediaPipe, CNN, dlib
Cloud & DevOps:	AWS {CDK, Lambda, SQS, S3, ECS, CloudWatch}, CI/CD, GitHub Actions
Development & Security:	Spring Batch, JUnit, Mockito, Git, RESTful APIs, Authentication, Network Programming
Databases & Tools:	MySQL, Firebase, DynamoDB, Linux, Ansible, JSON, XML