SIDDHARTH JAIN

Seeking Early Mobile SWE Roles

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

Arizona State University (ASU) August 2020 – May 2024
Bachelor of Science in Computer Science *4.00 GPA*
- Courses Taken: Software Design Principles, Operating Systems, Distributed Systems, Computer Networks, Digital Design

WORK EXPERIENCE

Software Engineer Intern May 2025 – August 2025
PayPal *Scottsdale, AZ*
- Engineered **Spring Batch** pipeline using **Java & Raptor** reducing manual **SQL** fixes by 90% and enabling millions of loan reconciliations.
- Built idempotent and thread safe batch job architecture resolving data staleness across **BigQuery** and **SOR** distributed systems at scale.
- Optimized **BigQuery** slot utilization by 75%, saving costs while maintaining system performance and increasing loan processing capacity.
- Implemented **Skip Listeners** with concurrent failed record accumulation, performing batch writes achieving 200x faster processing.

Software Engineering Fellow January 2024 – May 2024
Andbounds *Remote, USA*
- Led **CMS & iOS** app migration projects for e-commerce focused on scanning and selling custom insoles for podiatry patients.
- Leveraged TrueDepth sensors and **Core ML** with TheStandardCyborg library to detect and export 3D foot scans.
- Migrated iOS application with 40+ pages from storyboard to **SwiftUI** leveraging MVVM architecture and CocoaPods as PDM
- Integrated 15+ Shopify's Rest APIs to the iOS app to authenticate users, fetch order and user details, export scans, and place orders.

Software Development Engineer Intern May 2023 – August 2023
Amazon *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

Study Buddy | Full-Stack iOS Developer | *SwiftUI, Firebase, CoreData, C#*
- 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.

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.**

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%.

SKILLS

Mobile Development:	iOS {SwiftUI, CoreML, CocoaPods}, Android {Java}
Languages:	Java, Swift, Python, C/C++, TypeScript
Development:	Object-Oriented Design, Software System Design, MVVM Architecture
Tools & Frameworks:	Git, JUnit 5, Spring Batch, Firebase {Auth, Firestore}, CoreData
Cloud Services:	AWS {CDK, Lambda, SQS, S3, CloudWatch}