

EDUCATION

- Masters in Computer Science, University of Illinois at Urbana-Champaign** 12/2025
- **Coursework:** Distributed Systems, Communication Networks, Database Systems
- Bachelors in Computer Science + Economics, University of Illinois at Urbana-Champaign** 05/2024
- **GPA:** 3.8/4.0
 - **Coursework:** Compilers, Systems Programming, Algorithms, Computer Architecture, Data Structures

EXPERIENCE

- Software Engineer (IEDO), Stanford University** 05/2023 — 09/2023
- Prototyped alternatives to failing LDAP Perl scripts, reducing error count by 99.99%
 - Securely synchronized PII of 50,000+ users via Kerberos system authentication
 - Increased estimated throughput 25x by developing Docker software distributed via Google Kubernetes Engine
- Software Engineer, Synchrony** 05/2022 — 12/2022
- Used Terraform (IaC) to securely deploy Google Cloud Platform (GCP) projects protecting \$100B+ in assets
 - Reduced \$15K annually in redundant costs by creating a GCP workflow to automate budget reviews
 - Researched migrating On-prem machines to Azure VMWare Solution, bettering user experience for 70M active users
- Research Assistant, Digital Humanities Project** 10/2021 — 05/2022
- Detected faces of actors within moving and still images via Google MediaPipe and OpenCV2
 - Developed skin detection pipeline to detect the average color of smooth skin patches on input faces
 - Generated Makefile to enable multithreading and to streamline batch processing analysis on dataset of 1500+ images
 - Resolved Python architecture inconsistencies for academic distribution across Apple Silicon machines
- iOS Developer, Neuroleap** 12/2019 — 01/2021
- Migrated 1K+ lines of code from Swift 4 to 5 for application that assists mental health diagnoses in children
 - Implemented Text-to-Speech systems via Swift Speech Synthesis to aid 55K blind children
 - Generated Makefile to enable multithreading and to streamline batch processing analysis on dataset of 1500+ images
 - Moved results securely to the cloud for 120+ educational professionals to have multi-device support and data redundancy

PROJECTS

- Parallelization, NCSA HPC Systems Workshop**
- Remotely configured a high performance compute (HPC) cluster
 - Optimized large yet common scientific computations using OpenMP (C++)
 - Deployed solutions via Jobscript and saw over 10x speedups
- Quotable, Google Software Product Sprint**
- Learned full stack web technologies (HTML & CSS for frontend with Java Servlets for backend)
 - Brainstormed, designed, and created Quotable for 150M Kindle users
 - Used React & Bootstrap for client side experience and Firebase for the database, authentication, and multiuser support
 - Deployed application using serverless scalable Google Cloud App Engine

PROFESSIONAL DEVELOPMENT

- Associate Cloud Engineer Certification, Google** 08/2022
- Set up a cloud solution environment (configure network, access, security, etc)
 - Plan, configure, deploy, implement, and ensure successful operation of a cloud solution

SKILLS

Languages: C/C++, Python, Java, Lua, Swift, Javascript, Typescript, OCaml, Assembly (MIPS), Verilog, LaTeX

Libraries & Tools: GCP, Azure, AWS, Terraform, Docker, Kubernetes, Firebase, MongoDB, SQL, Flask, REST, Git, Unix/Linux, Tmux, Neovim, OpenMP, MPI, Jobscript