
NICHOLAS SEIDL

Software Engineer

I have experience in industry working a variety of roles. I most recently built two web services at Apple: one for **content analysis and retrieval** and one for **hosted image comparisons and history**. Most of my work has been on backend and middle-tier features working heavily with **APIs, micro services, and Python**.

I'm currently looking for a position (Jan. -> Aug.) on a camera/imaging/photos team focused on **image processing, recognition, and classification** in order to pursue interests in **photography** and **machine learning**.

Contact

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nseidl.io



github.com/nseidl



[/in/nicholaskseidl](https://in/nicholaskseidl)

Languages

Python, Java, Javascript,
Swift, C, C++

Software

Tornado, Flask, React,
Typescript, Redux, Node,
S3, Postgres,
Elasticsearch, MySQL,
SQLAlchemy, REST,
Docker, Unix, git

Courses

Algorithms and Data
Structures

Artificial Intelligence

Object Oriented Design

Computer Systems

Linear Algebra

Probability and Statistics

Interests

Board Member of Pool
Club, Photography Club,
Basketball, Hiking

Experience

Apple Inc.

Cupertino, CA

Full Stack Software Engineer - IMG QE

Jan. 2018 - Aug. 2018

- Content Collection: audio/image/video/stream analysis and retrieval
 - Rebuilt web service via backend architecture and frontend upgrades
 - Integrated blob (Amazon S3) and metadata (Postgres) stores to serve content
 - Leveraged Python and Tornado for asynchronous and non-blocking REST API
 - Extracted attributes from audio, image, video, and stream (HLS) content (Swift)
 - Improved frontend with React, Bootstrap, Node, and Buildpack
- Image Comparisons: image comparison web service with history
 - Rewrote backend in Flask; expanded API for frontend and hosted comparisons
 - Created minimal frontend with Typescript, React, Redux, Node, and Yarn
 - Modularized backend so different comparison algorithms can easily be added

UnitedHealth Group - Optum Technology

Boston, MA

Lead Backend Developer

Summer 2017

- Engineered pluggable Blockchain platform; adapted to bank transaction reconciliation and facilitation (big data)
- Designed, implemented, optimized backend and middle-tier pipeline (Python, Bash): MySQL → .csv → JSON → Elasticsearch → Blockchain → Hash Enforcer
- Leveraged Docker and Openshift for rapid deployment of system infrastructure
- Served as Scrum Master in Agile team of 8: 1 week sprints, 1 week iterations
- Created Shark Tank presentations bi-weekly: demo, business case analysis

Quanergy Systems

Sunnyvale, CA

R&D Software Engineer

Summer 2016

- Developed on Agile team of 10 members: optimized barebones Linux image for deployment on small embedded systems (LiDARs) (C++, Bash)
- Improved raw data logging feature for LiDARS using Quanergy software; implemented naming and data logging conventions (XML, JSON)
- Worked on continuous integration for software team (Jenkins, AWS, Stash, git)

Education

Northeastern University

Boston, MA

Bachelor of Science in Computer Science

Expected: Dec. 2019

College of Computer and Information Science

Sept. 2015 - Present

GPA: 3.5 / 4.0
