
NICHOLAS SEIDL

Machine Learning Engineer

I have experience working on various **machine learning** projects, particularly focused on **computer vision** and **data**. I'm currently working at Apple doing **data science** on CV and NLP datasets, as well as **data pipelining**. I built a **live object detector (YOLO)** for Wayfair in Summer 2019. In Spring 2019, I worked on **robustness analysis** of Apple's Neural Face Detector. In Spring + Summer 2018, I built two **web services** at Apple: one for **content analysis and retrieval** and one for **hosted image comparisons and history**.

Contact

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nseidl.io



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



github.com/nseidl

Languages

Python, Java, Javascript

Software

Airflow, Kubernetes,
Tensorflow, TensorRT,
Keras, TFLite, CoreML,
Tornado, Flask, React,
Typescript, S3, EC2,
Postgres, REST,
Elasticsearch, Docker, nltk,
pandas, numpy

Courses

Algorithms and Data
Structures
Artificial Intelligence
Linear Algebra
Distributed Systems
ML and Data Mining
Object Oriented Design
Computer Systems
Programming Languages
Probability and Statistics

Interests

Formula 1, Chess, Pool,
Photography, Basketball,
Hiking

Experience

Apple Inc.

ISE SIML - Machine Learning Engineer

Cupertino, CA
February 2020 - Present

- Computer Vision
- Natural Language Processing
- Data Science
- Cloud Compute
- Active Learning and Selection
- Robustness Analysis
- Annotation Aggregation
- Data quality and pipelining
- Email me for most up-to-date resume

Wayfair LLC

Data Science - Computer Vision Engineer

Boston, MA
June 2019 - Aug. 2019

- Implemented YOLO(v3) neural network for live on-device object detection
- Optimized with quantization, CUDA, cuDNN, TensorRT, and Tensor Cores
- Achieved 80x speedup in inference time and up to 4x smaller model sizes

Apple Inc.

C&P CVML - Machine Learning Engineer

Cupertino, CA
Jan. 2019 - June 2019

- Analyzed failures of face detector to target aggressors and guide development
- Designed and automated robustness analysis pipeline: inference → detection evaluation → robustness analysis → visualization
- Managed data collection, selection, and annotation (guidelines, spec, and quality)

Apple Inc.

IMG QE - Full Stack Software Engineer

Cupertino, CA
Jan. 2018 - Aug. 2018

- Content Collection: audio/image/video/stream analysis and retrieval
 - Integrated blob (Amazon S3) and metadata (Postgres) stores to serve content
 - Extracted attributes from audio, image, video, and stream content (Swift)
- Image Comparisons: image comparison web service with history
 - Rewrote backend in Flask; expanded API for frontend and hosted comparisons

Education

Northeastern University

Bachelor of Science in Computer Science

Khoury College of Computer Sciences

Boston, MA
Sep. 2015 - Dec. 2019
GPA: 3.6 / 4.0