

Jay Tappen

Email: fjt37@cornell.edu
Phone: (978) 835 - 6705
Current Address: Ithaca, NY
Home Address: Carlisle, MA

Education

Cornell University, College of Engineering

BS in Computer Science, Minor in Operations Research
○ 4.00 / 4 GPA
○ Summa Cum Laude
○ Engineering Co-op Award of Distinguished Honor
Master of Engineering in Computer Science

Ithaca, New York
Aug 2014 – Dec 2017

Jan 2018 – Dec 2018

Previous Employment

Decipher Technology Studios

Engineering Co-Op – Data Science and Machine Learning

Alexandria, Virginia
Jan 2017 – Aug 2017

- Designed and implemented a machine learning pipeline to extract text from real-scene images. Created a convolutional neural network for text localization with output analysis for straightening text. (Python with TensorFlow)
- Scripted the generation of millions of training images for the model. (Python)
- Localized and straightened text on street signs, buildings, license plates, business cards, and whiteboards with a single model. Demonstrated accuracy on multiple scripts, including English, Arabic, and Chinese.
- Wrapped pipeline in a microservice and integrated it with an existing product suite. (Go)

NWN Corporation

Associate Solutions Engineer

Waltham, Massachusetts
Summers of 2013, 2014, and 2015

- Programmed an asynchronous SOAP client and integrated it with existing network monitoring software. (Python)
- Wrote scripts to improve the efficiency and efficacy of on-call engineers. (Python)

Programming Experience at Cornell University

Course Projects

Aug 2014 – Present

Learned through my own work and in collaboration with other students.

- Built a SQL interpreter and query optimizer in a team. Implemented algorithms for handling datasets too large to be held in memory. (Java)
- Wrote an asynchronous two-thirds consensus protocol designed for distributed system reliability. (OCaml)
- Implemented a multithreaded SMTP mail server. (Python)
- Explored methods for learning from large, messy datasets with different model types, training methods, loss functions, and regularizers. (Julia)

Independent Study

Jan 2016 – May 2016

Created and published a database-driven website to function as an online homework agenda for high school students. (PHP, JavaScript, MySQL (MariaDB), HTML, CSS)

Skills

Languages: Python, Java, Go, and 10+ more with the willingness and ability to learn others

Operating Systems: Windows, Mac, Linux (CentOS, Ubuntu)

Development/Deployment Systems: GitHub, Amazon Web Services