Jay Tappen

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Current Address: Ithaca, NY
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Education

Cornell University, College of Engineering Ithaca, New York
BS in Computer Science in 3.5 years *Aug 2014 – Dec 2017*
- 3.97 / 4.0 GPA, Dean's list every semester
- Engineering Co-op Award of Distinguished Honor

Masters of Engineering in Computer Science *Jan 2018 – Dec 2018*

Previous Employment

Decipher Technology Studios Alexandria, Virginia
Engineering Co-Op – Data Science and Machine Learning *January – August 2017*
- Designed and implemented a machine learning pipeline to extract text from real-scene images. Created a convolution neural network for text localization with custom output analysis code for straightening text. (Python with TensorFlow)
- Scripted the generation of millions of training images for the custom 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 Waltham, Massachusetts
Associate Solutions Engineer *Summers of 2013, 2014, and 2015*
- Programmed an asynchronous SOAP client in Python 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 *Fall 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 *Spring 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, OCaml, +10 others and the willingness and ability to learn more
Operating Systems: Windows, Mac, Linux (CentOS, Fedora, Ubuntu)