

Education

Bachelor of Science in Computer Science

George Mason University, Honors College - 2017

Skills

Languages

Python	Advanced
Java	Intermediate
JavaScript	Novice

Machine Learning

Machine Learning	Intermediate
Linear Algebra	Intermediate
Statistics	Novice

Environments

Jupyter	Intermediate
PyCharm	Novice
Docker	Intermediate

Libraries

Keras	Advanced
TensorFlow	Intermediate
np, pd	Advanced

Experience

Machine Learning Engineer, February 2019 - Present

Next Century, NextCentury.com

2019 Machine Learning data fusion research on MediFor Project
Python, Docker

Associate Software Engineer, July 2013 - January 2019

Innovative Defense Technologies, IDTus.com

2018 Developed tools for stress testing distributed micro services and benchmarking performance
Docker, Apache Bench, JMeter
Continuous on-site support for customers
Architected and constructed a Continuous Integration pipeline for a customer through an iterative process
Jenkins, GitLab, Nexus, Jira, HipChat, Apache email

2017 SBIR proposal technical writer.
Efficient metadata search using machine learning
Python, LOPQ clustering algorithm

2016 Executed STIG security compliance tests
Rapid vulnerability discovery via machine learning fuzz test
Python, genetic algorithm

2015 Improved optical character recognition (OCR) from 30% to 70%
Java, Tesseract (OCR tool), statistical modeling

2014 Plotted vehicle locations on NASA's WorldWind

2013 Automated testing, unit testing and bug fixes

Personal Projects

Kaggle, kaggle.com/ottpeterr

99%+ accurate MNIST digit classification

2D conv. net, Keras

Fraudulent purchase detection

Random forest, neural net, Keras

New York Taxi fare prediction

Dataset of 50,000,000 rows

Pneumonia detection using x-ray imagery

2D conv. net, image generation for training

Raspberry Pi

Home surveillance camera Raspberry Pi with chat bot integration

Python, Telegram (chat platform), on my GitHub

Raspberry Pi 4-node cluster for Docker Swarm

Hobbies

Home Automation

Various Raspberry Pi's running home surveillance cameras, network wide ad-blocking, smart light control, presence detection, family location sharing and more!

MX-5 Miatas

Ask me about it!