Colin Versteeg
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PROFESSIONAL EXPERIENCE

Microsoft
AI Inferencing and Infrastructure
Software Engineer

Nov. 2017 -
Redmond, WA

- Launched Azure Machine Learning Hardware Accelerated Models service, based on research from Microsoft Research, for acceleration of Neural Networks on Field Programmable Gate Arrays (FPGAs), delivering execution 50 times faster then CPUs, at less than a quarter of the cost of GPUs
- Developed high performance C++ and C# gRPC servers to operationalize Tensorflow and ONNX graphs into a high performance DNN inference service on Kubernetes with sub-5ms overhead
- Developed Python software to identify portions of Tensorflow graphs which can be accelerated, operationalize Keras, ONNX and Tensorflow models and invoke remote inferencing
- Grew team from 2 engineers to 8 to move product from initial proof of concept to general availability

Microsoft
Machine Learning Server
Software Engineer

Aug. 2016 - Nov. 2017
Redmond, WA

- Prototyped initial support for Python in Microsoft R Server and Microsoft SQL Server as part of a 4-person virtual team, leading to the launch of Microsoft Machine Learning Server and SQL Server Machine Learning Services
- Designed and implemented support for Python machine learning model operationalization in Microsoft Machine Learning Server

Booz Allen Hamilton
Malware Analysis Intern

June 2015 - Aug. 2015
Annapolis Junction, MD

- Developed a software prototype to automate creation of a streaming data pipeline for malware analysis using Apache Storm, Elasticsearch, Java and Python to support 20+ consultants serving government and commercial clients
- Designed and developed data extraction components in a four intern team to expand the initial scope of the project by 25%

Food and Drug Administration
Mathematics and Statistics Trainee

May 2014 - Aug. 2014; Jan. 2015
Silver Spring, MD

- Researched non-linear metrics to assess image quality in X-ray CT for regulating advances in iterative reconstruction algorithms
- Developed a public-domain software package for streamlined generation of advanced algorithm assesment studies in Python with NumPy and MATLAB to assist industry in evaluating performance of iterative reconstruction algorithms
- Awarded Oak Ridge Institute for Science and Education fellowship for undergraduate research

Food and Drug Administration
Research Intern

May 2013 - Aug. 2013
Silver Spring, MD

- Researched methods to evaluate performance of machine learning iterative reconstruction algorithms for reducing artifacts in X-ray CT scans.

EDUCATION

University of Maryland
B.S. *Computer Engineering*

May 2016
College Park, MD

- College Park Scholars Public Leadership honors program
- Men's Ultimate Team Co-Captain
- Undergraduate Teaching Fellow, Engineering Ethics and Professionalism

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SKILLS

Programming Languages: Python, C$^\sharp$, C++, R, F$^\sharp$, Go

Platforms/Technologies: .NET Core, gRPC, TensorFlow, Kubernetes, Windows, Linux