

Objective

Data scientist focused on research and applications in machine learning.

Education

Bachelor of Science, Computer Science
University of Tennessee, Knoxville, TN (UTK)
Summa Cum Laude, GPA 3.80

August 2012 - December 2016

Research Experience

Imaging, Signals, and Machine Learning Group

Oak Ridge National Laboratory (ORNL)

January 2017 - Present
Advised by Dr. Derek Rose

- Using deep learning image segmentation techniques to annotate neurons in calcium images for biological experiments.

Neuromorphic Computing Research Group

UTK Electrical Engineering and Computer Science Department

Fall 2015, Summer - Fall 2016
Advised by Dr. James Plank

- Developed simulated unmanned aerial vehicle and three-dimensional navigation applications on the neuromorphic platform.
- Investigated algorithmic improvements in evolutionary optimization for training neuromorphic networks.

Recent Publications (abbreviated citations)

- **A. Klibisz**, G. Bruer, C. D. Schuman, and J. S. Plank. Structure-based Fitness Prediction for the Variable-structure DANA Neuromorphic Architecture. In *International Joint Conference on Neural Networks*, Anchorage, May 2017.
- C. D. Schuman, A. Disney, S. P. Singh, G. Bruer, J. P. Mitchell, **A. Klibisz**, and J. S. Plank. Parallel Evolutionary Optimization for Neuromorphic Network Training. In *Machine Learning in HPC Environments, Supercomputing 2016*, Salt Lake City, November 2016.

Professional Experience

StudyLoop Web and Mobile Application

Knoxville, TN

June 2015 - March 2016
Co-Founder, Software Engineer

- Developed the StudyLoop web application and all server-side services.
- Collaborated with two iOS developers to release web and iOS applications in approximately three months.

Cadre5, LLC

Knoxville, TN

Spring 2014, Summer 2015
Software Engineering Co-op

- Developed features for two customer web applications on client, server, and database levels.

Georg-August University

Göttingen, Germany

Summer 2014
Software Engineering Intern

- Developed an automated user interface testing suite for a web application used for exam scheduling.

Duracell Packing and Manufacturing Plant

Cleveland, TN

Summer 2012, Summer 2013
Software Engineering Intern

- Contributed to internal web applications for emergency response and safety audits.

Professional Skills

- Programming languages: Python, Javascript, C++, HTML/CSS, C, SQL, Java.
- Libraries and tools: Scikit-learn, Pandas, Numpy, Keras, Gensim, igraph, MPI, OpenMP.
- Infrastructure: Docker, Jenkins CI, AWS EC2, AWS Elastic Beanstalk, AWS Lambda.
- Source control: Git, Subversion.

(Listed in order of proficiency.)

Honors

- Selected for the Knoxville Entrepreneur Center “CodeWorks” startup accelerator program, September - December 2015.
- UTK Chancellor’s Honors Program, 2012 - 2016.
- UTK Dean’s List, 2012 - 2016.