David Morton

davidlmorton@gmail.com | 816.261.2072

Linkedin: https://www.linkedin.com/in/david-morton-52a30946/
Github: https://github.com/davidlmorton

Software Developer turned **Deep Learning Researcher**

EXPERIENCE

DEEP LEARNING | Independent Study
Jan 2018 - Present

- Completed fast.ai online deep learning curriculum.
- Authored a deep learning library that makes it easier to train pytorch models called pytorch-sconce.
- Built, from scratch, variational autoencoders, wide resnet based image classifiers, and time series prediction networks.
- Gained experience with cyclical learning rate, large batch size training, and fine-tuning pretrained networks.

CARE OTTER | Expert Software Developer
April 2017 – Jan 2018 (9 months)

- Architected, developed, deployed and documented a cloud based Enterprise Master Patient Index (EMPI) application built using Python (Flask based stateless web application backed by Elasticsearch).
- Communicated with stakeholders to understand the business opportunity, timelines and performance requirements for the EMPI application.
- Worked with data scientists to design, evaluate, and iteratively improve patient matching strategies.
- Designed and implemented the Continuous Integration pipeline that used Microsoft VSTS jobs to test and deploy code.
- Set up and documented the setup of a Kubernetes cluster in Azure running Deis Workflow.
- Set up application monitoring using Elasticsearch/fluentd for log aggregation and Kibana for visualizing application/server metrics.

CENTURYLINK | Lead Software Developer
March 2016 – April 2017 (1 year)

- Developed a Django based, RESTful backend and single page web app to triage support requests.
- Maintained and extended a Mojolicious based web application that acted as a common facade for disparate enterprise ticketing, billing and content management systems.
- Maintained and extended a Jenkins backed CI/CD system.
- Managed a cluster of virtual machines using Ansible.
- Became a Red Hat Certified System Administrator.

MCDONNELL GENOME INSTITUTE | Software Developer
June 2012 – March 2016 (4 years)

- Designed, implemented and deployed a highly scalable, service oriented workflow execution system.
- Developed a domain specific language to help design complex genomics pipelines.
- Maintained and extended a Perl based scientific software suite focused on genomics.
- Improved automated testing infrastructure and reduced test times by writing software that could track what tests needed to be run when any given code lines were changed.

EDUCATION

WASHINGTON UNIVERSITY IN SAINT LOUIS | PhD in Physics
2012 • Thesis: The Automation of Electrophysiological Experiments and Data Analysis

UNIVERSITY OF MISSOURI: KANSAS CITY | MS IN PHYSICS
2007 • Thesis: Methodology of a Self-Consistent Green's Functions Approach in Nuclear Matter at Finite Temperature

UNIVERSITY OF MISSOURI: KANSAS CITY | BS IN PHYSICS
2004

CENTRAL MISSOURI STATE UNIVERSITY | BS IN COMPUTER SCIENCE AND MATHEMATICS
2002