Sean Shahkarami

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Skills

Development: Python, Go, Bash, Javascript, SQL, Linux, Docker, Kubernetes

AI / Machine Learning: PyTorch, fastai, Scikit-learn, Pandas, Numpy, Scipy

Experience

Software Developer for Sage and Waggle: Argonne National Lab January 2016-Present

I'm enabling new science through cyberinfrastructure for artificial intelligence and machine learning applications at the edge.

• Enabled users to build applications for Sage through Python SDK and Kubernetes app stack.

• Provide users on-demand, searchable data access through data API service.

• Provided Waggle users 300GB+ data archive updated nightly through efficient data pipeline.

• Ensured 100s of Waggle nodes functioned correctly by creating QA system and personally training assembly line technicians.

• Kept our Waggle nodes operating through firmware development of our power management board and incorporating robustness features into Linux system.

• Cut iteration time and effort on our ODROID Linux system by creating Docker based OS build system. Build times dropped by a factor of 4-5 and no longer needed special hardware.

• Regularly meet with AI / machine learning team to provide guidance and support in application development.

• Engage with users and summer students through code sessions and platform tutorials.

Education

Ph.D in Mathematics: University of Illinois at Urbana-Champaign, 2013-2016, *Incomplete*

M.S. in Mathematics: University of Illinois at Urbana-Champaign, 2011-2013

B.A. in Mathematics, Minor in CS: University of Illinois at Urbana-Champaign, 2007-2011