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: Argonne National Lab, 2019 - Present

- Own entire software development lifecycle for large number of key node and cloud services such as:

  - End-to-end node to cloud data pipeline.

  - On-demand data query API and archival system.

  - Python SDK for writing platform applications.

- Identify and take ownership of addressing critical security and "no go" issues across platform.

- Meet with AI / ML team to provide guidance and integrate feedback into software stack.

- Directly engage user base to educate and collect feedback on platform.

Software Developer for Waggle: Argonne National Lab, 2016 - 2019

- Developed end-to-end node and cloud data pipeline which served near-real time and historical data archives. Archives contained 300GB+ and were updated nightly.

- Independently developed and maintained Python SDK for writing system applications.

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

- Lead developer of power management and sensor board firmware.

- Independently developed and incorporated robustness features into embedded and Linux systems.

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

Education

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

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