Sean Shahkarami

sean.shahkarami@gmail.com | github.com/seanshahkarami

I've been an avid programmer since about 2004. My formal education is in pure and applied math with a strong emphasis in computing. These days, I'm looking forward to what I can do in the exciting AI/ML space.

Skills

Python, Go, Bash, PyTorch, Scikit-learn, Pandas, Linux, Docker, C/C++, SQL, Git

Work Experience

Waggle / Sage / Array of Things Developer | Argonne National Lab | Since January 2016
I'm helping fuel future science by building scientific cyberinfrastructure for AI/ML applications at the edge. Here are some pieces I've worked on:
• Developed data pipeline which compiles ~300GBs of data nightly.
• Developed open-source Python and C++ platform libraries used by all users.
• Containerized many parts of our software stack.
• Developed Virtual Waggle user development toolchain.
• Redesigned OS build process to reduce build times from hours to minutes and run "anywhere".
• Developed firmware for our system critical embedded WagMan board.
• Developed interactive QA process used by our manufacturing partners and technicians.
• Guided summer interns through the design, implementation and integration of software tools.

Math and Computer Science Intern | Argonne National Lab | Summer 2015
I implemented code and tools going towards a large scale watershed simulation. This involved knowledge of fluid mechanics and hyperbolic PDEs, tool development in Python, and building the simulation on top of PETSc in C.

Education

• Progress towards Ph.D in Mathematics, 2011-2016, UIUC
• M.S. in Mathematics, 2011-2013, UIUC
• B.A. in Mathematics with Minor in Computer Science, 2007-2011, UIUC