

Rob Kelly

ABOUT

Highly-skilled software developer with more than 6 years of experience delivering high-quality, high-reliability software solutions to challenging R&D problems.

SKILLS

Clearance

Active Q Clearance, in-scope Tier 5 investigation July 2020

Languages

Python • Java • C++ • C# • MATLAB
Rust • Perl • Javascript • C • R • bash

Tools

Git • TravisCI • Gitlab CI/CD
Docker • pandas • NumPy
Cython • Flask • SQLAlchemy
MySQL • PostgreSQL • OpenCV
OpenGL • Arena • \LaTeX

Other Experience

Agile • project management
Strongly proficient in Linux

EDUCATION

B.Sc. in Computer Science

B.Sc. in Mathematics

*New Mexico Institute of Mining
and Technology*

2011 — 2016 Socorro, NM

- 3.36 GPA, graduated with honors.
- Electives included theoretical & applied statistics, operations research, modeling, numerical linear algebra, cryptography, abstract algebra, databases, and neural networks.

EMPLOYMENT

Software Engineer (Contractor)

Feb 2019 — Jan 2021

Science Applications International Corporation Albuquerque, NM

- Worked with a small team at Sandia National Labs' Quantum Performance Lab developing and maintaining open-source software in Python for modeling and characterizing noisy quantum information processors.
- Implemented unit/regression tests and automated CI/CD to consistently deliver high-quality features.
- Identified bottlenecks and implemented optimizations in high-performance numerical analysis applications. Provided expert analysis on design of distributed Industrial IoT (IIoT) control systems and developed Sparkplug-B/MQTT distributed control solutions.

Software Engineer

Jun 2014 — Nov 2017

Magdalena Ridge Observatory Socorro, NM

- Worked on a team developing control software for the MRO Interferometer (MROI) and the New Mexico Tech Extrasolar Spectroscopic Survey Instrument (NESSI).
- Developed, deployed, and integrated control software for optical imaging subsystems with MROI in-house SCADA network.
- Designed and managed development of the MROI Alignment Control System (ACS).
- Managed team DevOps with Gitlab RCS & CI/CD in a iterative test-driven development environment.

Research Assistant to Dr. Hamdy Soliman

Jan 2016 — May 2016

NMT Dept. of Computer Science & Engineering Socorro, NM

- Graded course work, prepared lab curriculum, and instructed lab course for CSE 489: Introduction to Neural Networks Applications.
- Students developed solutions to real-world data clustering and classification tasks by applying neural network techniques using Weka, the MathWorks Neural Network Toolbox, and TensorFlow.

Grader, Tutor, TA

Jan 2013 — May 2014

NMT Dept. of Computer Science & Engineering Socorro, NM

- Graded course work, instructed labs on programming in C (CSE 113) and Python (CSE 107).
- Graded and tutored for a course on data structures and algorithm analysis (CSE 122).

1109 6th Street • Albuquerque • New Mexico 87102

✉ contact@robkel.ly 📞 816-872-4014

📄 robkel.ly 🌐 gitlab.com/krapus

US Citizen — Active DOE Q