

# ROB KELLY

## EMPLOYMENT

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EMPLOYER	<b>Magdalena Ridge Observatory</b>	
POSITION	<b>Software Engineer</b>	May 2016 — Nov 2017
	<b>Student Software Developer</b>	June 2014 — May 2016
	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). Also managed team DevOps with Gitlab RCS & CI/CD in a iterative test-driven development environment.	
EMPLOYER	<b>Dr. Hamdy Soliman, NMT Dept. of Computer Science &amp; Engineering</b>	
POSITION	<b>Research Assistant</b>	2016
	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.	
EMPLOYER	<b>NMT Dept. of Computer Science &amp; Engineering</b>	
POSITION	<b>Grader, TA – CSE 107, Intro. to Programming using Python</b>	2013
	<b>Grader, Tutor – CSE 122, Algorithms and Data Structures</b>	2013
	<b>Grader, TA – CSE 113, Introduction to Programming</b>	2012 — 2013
	Graded course work and instructed lab courses on programming in C and Python. Graded and tutored for a course on data structures and algorithm analysis.	

## EDUCATION

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UNIVERSITY	<b>New Mexico Institute of Mining and Technology</b>	2011 — 2016
DEGREES	<b>B.Sc. Computer Science</b>	
	<b>B.Sc. Mathematics</b>	
GPA	<b>3.36</b>	
AWARDS	<b>NMT Silver Scholarship</b>	2011 — 2013
	<b>NMT President's Honor Roll</b>	2014 — 2016
	Electives included: applied & theoretical statistics, modeling, operations research, numerical linear algebra, abstract algebra, cryptography, neural networks, and databases.	

## SELECTED SKILLS

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<b>Languages</b>	Java, Python, C, C++, R, MATLAB, Rust, Perl, Javascript, bash
<b>Tools</b>	Git, CI/CD (gitlab), Docker, PostgreSQL, Rockwell Arena, OpenCV, Weka, $\LaTeX$
<b>Other Experience</b>	Linux as a user, web server administrator, and DevOps engineer.

## PERSONAL ACTIVITIES

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<b>NMT ACM</b>	Organized and participated in NMT Game Jams in 2012, 2013, and 2015, and the ACM ICPC programming competition in 2013 and 2014.
<b>NMT NetSec CTF</b>	Participated in CSAW CTF qualifiers, placing 8th globally in 2011, and 10th globally in 2012.
<b>Research</b>	Topics include behavior-based clustering of social media users, and classification of vehicle instrument data using neural networks.

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