

Erin Cole

760.310.0519 :: erincole567@gmail.com

EDUCATION

University of California, San Diego
B.S. Computer Science

September 2019

LEADERSHIP

- Mentor to female underclassmen in Women In Computing Sept 2017-present
- Expert Volunteer, Mozilla Open Leaders Jan 2018-present
- Professional Development Co-Chair: Women In Computing June 2015-June 2018
- Mozilla Open Leader, Round Four September 2017

TECHNICAL PROJECTS

- Creating online portfolio to learn website building and showcase my projects
- Continuing work with Prof. Kirill Levchenko to explore insights into the Bitcoin blockchain
- Developing a Web Application that aims to diminish stigma associated with mental health disorders

WORK EXPERIENCE

Mozilla: Data Engineer Intern June-Sept 2018

- Converted RDDs to DataFrames in Spark to build infrastructure for direct to Parquet and streaming
- Initiated a repository to store Benchmark Tests, paving capabilities for future measurements
- Demonstrated improvements in packing strategies by extending code for equal data partitions

UC San Diego Systems and Networking Lab: Undergraduate Researcher July 2017-June 2018

- Researched security of esignatures to discover vulnerabilities and political implications
- Wrote queries to Bitcoin blockchain data to understand return on investment
- Attended weekly meetings with Prof. Kirill Levchenko to update research findings

UC San Diego Voytek Lab: Undergraduate Researcher Jan 2015-June 2017

- Analyzed two datasets, Alan Brain Atlas and Neurosynth.org, to examine neural oscillations
- Found connections between gene expression and neurological and psychiatric disorders
- Structured the overall algorithms of the project and taught introductory coding in Python

Teradata: Software Engineering Intern June-Sept 2016

- Updated the Open Source TeradataR Package on GitHub for easier access to Teradata Database
- Wrote documentation, performed unit testing, and initiated code refactoring for package
- Coded in R around two table operators and for thirty wrapper fastpath functions

Stone Brewing Co.: Engineering Intern: SCADA June-Sept 2015

- Received in depth training in Ignition with Python, Java, and SQL, automated brewery processes
- Constructed a database of Key Performance Indicators, improving data updates to real time
- Wrote programs for barcodes and labels, added feature designate empty-dirty and empty-clean tanks
- Helped install Aber Yeast Cell Counter, optimized previous process to estimate yeast cell count

NASA Sponsored California Space Grants Projects: Arduino Group July-Sept 2014

- Responsible for programming Arduino microcontrollers in C++, calibrated and soldered sensors
- Collected data while the microcontrollers traveled as payloads on near space balloons
- Improved accuracy of landings and measured temperature, altitude, acceleration, and GPS

INTERESTS	RELEVANT COURSEWORK	SKILLS
Apply big data to security	CSE120: Operating Systems	Python, R (Primary)
Cyber security research	MATH181A: Introductory Statistics	Scala, SQL, Java, C++ (Secondary)
Leadership growth	CSE127: Computer Security (planned)	Industry experience with Git/GitHub
Team collaboration	COGS189: Modeling and Data Analysis	Interact with large SQL databases
Math and statistics	CSE132A: Databases (planned)	Strong written and verbal communication