Reeya Chenanda

CONTACT

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EDUCATION

California Institute of Technology
BS Electrical Engineering, Computer Science (minor)
2019-2023 4.00/4.00

Indiana Academy for Science, Mathematics and Humanities
Graduated High School with Honors
2017-2019 4.33/4.00

SKILLS

- Programming Languages: Java, Python, C++
- Basic Hardware and Circuit Configuration – Arduino

MATLAB Linux Mathematica

COURSES

- EE 10 ab – Introduction to Digital Logic and Embedded Systems *Θ*
- EE 44 – Deterministic Analysis of Systems and Circuits *Θ*
- CS/CNS/EE 156 a – Learning Systems (Machine Learning) *Θ*
- CS 2 – Introduction to Programming Methods (*Algorithms and Data Structures*)
- Ph 3 – Introductory Experimental Physics Lab (*Experience with Oscilloscopes and Arbitrary Waveform Generators*)

Θ: currently enrolled

EXTRACIRRICULARS

- Starting Midfielder for Caltech Women's Soccer Team
- National Center for Women & Information Technology (NCWIT) Affiliate Award, 2019
- Avid Traveler – visited all 7 World Wonders

PROFILE

Seeking an engineering internship in the summer of 2021 to gain hands on experience and sharpen my technical *skills* while contributing to the success of the projects I work on. Enthusiastic problem solver ready to innovate, with a demonstrated history of working in research and technology.

PROFESSIONAL EXPERIENCE

Undergraduate Researcher
LIGO Caltech| Pasadena, CA | Jan 2020-Present

The Laser Interferometer Gravitational-Wave Observatory (LIGO) is an observatory dedicated to detecting gravitational waves, partly operated by Caltech.

- Researching and developing a new device to assist with remotely maneuvering through the observatory, in response to the COVID-19 pandemic.
- Designed and conducted an experiment to test the breakdown voltage of a wire used on site. Published findings in a report in the LIGO Document Control Center (DCC).

Summer Undergraduate Research Fellow
NASA Jet Propulsion Laboratory| Pasadena, CA | Jun 2020-Sep 2020

- Archiving PDS4 (standard in Planetary Data System) mid-infrared & near-infrared spectral data from Jupiter's atmosphere.
- Wrote Python and IDL scripts to organize data and apply XML templates to images in FITS format.

Product Cybersecurity Engineering Intern
Cummins Inc. | Columbus, IN | Jun 2019-Aug 2019

- Deployed software tools, *Zenmap*, *Kali Linux, and VMware,* to do ethical hacking, assessing and identifying product vulnerabilities on Engines, Power Generators, and Websites.
- Tested and configured engine controllers and telematics devices (INLINE 7, CM 2450) for hardware vulnerabilities using Boundary Diagrams and FMEA (*Failure Mode Effect Analysis)*.

Power Systems Engineering Intern
Cummins Inc. | Seymour, IN | Jun 2018-Aug 2018

- Converted GPS latitude and longitude data into readable coordinates for international Cummins rail engines using the formula language *DAX* in *Microsoft* Power BI (Big Data analysis tool) to process data from satellites.
- Coded a script in MATLAB that generated a range of matrices to help optimize the transfer of data between a wear metal sensor and a Simulink model.

REFERENCES *Available Upon Request*