**Projects**

**Contributor to education of computer engineering | Reddit | online** September 2023 - present

* Assisted Reddit users with troubleshooting their prototyped circuits using their videos and descriptions
* Built and programmed a low-power computer with an 8-bit architecture, a 1kHz clock, and 16B memory
* Engineered an LED display for reflecting un-/signed data on the bus using 2K AT28C16 EEPROM ICs
* Resolved voltage fluctuations and poor current routing using multimeters and an oscilloscope
* Achieved full circuit functionality through modifying design solutions due to hardware limitations
* Resolved issues pertaining to incompatibility of components through improvisation using soldering skills

**Volunteer for development of terminal-based Gmail UI | GNU | online** August 2023 - September 2023

* Wrote step-by-step documentation on the installation and use of Notmuch for users of all backgrounds
* Achieved email fetching, syncing, storing, and look-up via the Bash terminal
* Repurposed configs in Elisp to leverage the IMAP protocol for fetching new emails
* Integrated the Notmuch email client within the config files for accessing and updating email space

**Software Engineering Intern | Bally Technologies, Inc., Reno, NV** November 2013 - May 2014

* Completed the core OCR components of a progressive jackpot monitoring system
* Researched the method of four moments as a design idea for numerical recognition
* Implemented dollar amount recognition and display in C++ using OpenCV
* Provided feedback on the implementation of the client-server capabilities in C#

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**Financially providing dependent student and co-resident family member** March 2009 - August 2017