

Codie M. Cottrell

Last Updated on 16th October 2020

(207)-745-4193 | codiecottrell@gmail.com

Experience

Lead Student Tech | UVM TechTeam

Feb 2016 – Nov 2018 | Burlington, VT

- Lead other student techs in technical leadership and a supervisory role.
- Wrote technical guides and improved communication techniques with clients which lead to faster diagnostics and improved feedback.
- Built upon directory of FAQ guides for MacOS and iPhone issues on our webpage, decreasing the volume of quick fix issues and shortening call times.

Graduate Teaching Assistant | University of Vermont

Jan 2019 – Dec 2019 | Burlington, VT

- **Courses:** Programming for Engineers, Computer Organization and Computability and Complexity
- **Responsibilities:** team direction, technical issue resolution, code reviews and pair programming with students in Python, Matlab, and Linux environments.
- Improved students engagement with the TAs by Implementing new office hour locations (coffee shops/beach) and expanding availability.
- Increased the class grade average by forming a post-class discussion group.

Education

M.S. in Computer Science | University of Vermont

Grad. Dec 2019 | College of Engineering and Mathematical Sciences | Burlington, VT

GPA: 3.24 / 4.0

Noteworthy Courses: Software Verification, Data Privacy, Computer Security Foundations, Computer Networks

B.S. in Physics | Minors in Mathematics and Philosophy | University of Vermont

Grad. May 2018 | College of Arts and Sciences | Burlington, VT

GPA: 3.34 / 4.0

Noteworthy courses: Computational Physics, Chaos Theory, Cybersecurity Principles

Recent Projects

Trouble Oct 2019 – Dec 2019

Description: The game Trouble multithreaded and written using the MVC design, Java and Agile software techniques.
- I had developed and integrated the GUI and designed the underlying data structures.

Software Defined Network Oct 2019 – Dec 2019

Description: 15 Raspberry Pi's setup in a LAN configuration to simulate network topologies.

Responsibilities: Developed lean and fast software in Python to define routing tables for each pi based off the current network topology.

Honorable Mentions:

- Implementing Differential Privacy with a gaussian mechanism on large (1M+) data sets.
- Secure Interpreter and Type Checker via Haskell
- VPN storage unit using a raspberry pi, a secure alternative to google drive.

Skills

Advanced: Python, Java, MacOS, L^AT_EX

intermediate: C, C++, Haskell, Agda, CSS, JavaFX, git

Working Knowledge: Swift, JSON, SQL, Machine Learning