**robertberger5@gmail.com**

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**Decorah, IA 52101**

**(563) 217-0636**

**Education:**

**St. Olaf College, Northfield, MN** Anticipated Graduation: May 2021

**Bachelor of Arts** Current GPA: 3.65

**Major:** Computer Science

**Concentrations:** Statistics and Data Science, German Studies

**Relevant Courses:** Algorithms and Data Structures, Parallel and Distributed Computing, Software Design, Hardware Design, Operating Systems, Linear Algebra, Robotics, Intro to Mathematical Reasoning, Statistics for Science

**In-Progress Courses:** Intro to Data Science, Mobile Computing, Programming Languages

**Technical Work Experience:**

**Cluster Manager | St. Olaf College** *March 2018 - Present*

* Set up and utilize high performance computing resources
* Provide support for student research projects and classwork
* Collaborate with other colleges to implement parallel and distributed computing into their curriculum

**Web Developer for HiPerCiC | St. Olaf College** *October 2019 - Present*

* Create web apps in collaboration with professors and research teams
* Implement MVC design patterns with a test-driven development workflow with Django
* Analyze existing code to fix bugs or add features

**TA for Hardware Design | St. Olaf College** *September - December 2018*

* Facilitated optional evening help sessions to elevate students to their maximum potential
* Collaborated with professor and other TAs to coordinate responsibilities and course curriculum
* Monitored labs to clear up student questions and diagnose errors in their code
* Corrected student lab assignments and advised them on further improvement

**Projects:**

**BergerRob.com:** *August 2019*

* Personal website displaying skills and achievements interactively
* Nginx server running on a Raspberry Pi in my basement
* Secure: HTTPS encrypted with sanitized user inputs and hashed/salted passwords

**RoboDog:** *Fall 2019*

* Created for Robotics class with a partner, written in Python with an accompanying app in Kotlin
* Models classical conditioning in dogs to prepare children before they attempt to train a real dog
* Translated pseudocode into very modularized Python classes and fine-tuned all dog tricks
* Designed an Android app to wirelessly connect to the robot and let the user give voice commands

**Extracurriculars:**

**Algorithms Club Vice President** *February 2020 - Present*

* Co-founded a student organization aimed at helping students with technical interview questions
* Introduce crucial concepts to students who haven’t taken the Algorithms and Data Structures course, and guide them as they begin to consider these concepts
* Assist the students who have taken the course to review and expand their knowledge of the subject

**Olaf-Carleton Engineering Team** *September 2018 - Present*

* Assist the Controls sub-team to construct drones that compete in IARC (International Aerial Robotics Competition) every year
* Use R.O.S. (Robot Operating System) to communicate with the drones

Programming Languages:

* C++
* Java
* Python
* JavaScript
* PHP
* Kotlin
* HTML/CSS
* Bash

Skills:

* Debian-based systems
* Simple Android Development
* Object-Oriented Programming
* Basic Docker and Kubernetes
* Backend server management, including hardware
* Basic networking
* Fundamental web development

World Languages:

* German (business proficient)
* Spanish (basic)

Rob Berger

Aspiring Software Engineer