Erik Rhodes

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Education

- **University of Colorado Boulder** — Boulder, CO
  Honors BS in Computer Science — *May 2021*
  Minor in Applied Math (Probability and Statistics Emphasis)
  GPA: 3.24

Relevant Coursework

Major

- Data Structures
- Computer Systems
- Principles of PL
- Algorithms
- Operating Systems
- Machine Learning
- Network Systems
- Linux Sys Admin

Supplemental

- Calculus 1-3
- Discrete Math
- Differential Equations
- Applied Probability
- Matrix Methods
- Numerical Comp
- Statistical Methods
- Markov Processes

Professional Skills

Proficient

- Rust
- Python
- C/C++
- MATLAB
- LaTeX
- Scala
- Apache Kafka

Basic

- Java
- Haskell
- C#
- R
- HTML/CSS
- JavaScript
- French
- German

Work Experience

- **CU Boulder Department of Computer Science** — Boulder, CO
  Course Assistant — *2019-2021*
  Assisted students with course-related questions, including on homework, quizzes, and general concepts, primarily through regular office hours. Also provided input on and occasionally helped develop course materials. Over five semesters, I worked with the courses Data Structures, Principles of Programming Languages, and Algorithms.

- **Loblolly Consulting** — Austin, TX
  Intern — *2019*
  Analyzed and visualized both public and company data using Tableau. Also worked to make internal data more robust, moving from Excel to using PostgreSQL and Python.

- **Phil's Icehouse** — Austin, TX
  Cashier/Front of House — *2016-2018*
  Took orders, assisted customers, bussed tables and generally kept the restaurant clean and organized.

Projects

- **Capstone Project: Complex Event Processing** — BI Inc/CU Boulder
  Kafka Developer — *Fall 2020-Spring 2021*
  Explored several platforms and technologies related to Complex Event Processing for our industry sponsor, BI Inc, including Apache Kafka, Trill (an open-source derivative of Microsoft StreamInsight), Amazon Timestream, and Redis. Personally responsible for developing several use cases in Apache Kafka to explore its capabilities and usability using its built in stream processing abilities, as well as integrating with Trill as a microservice. Final product was a presentation and research paper detailing our findings to help guide the company's future applications.

- **Engineers Without Borders: Rwanda** — CU Boulder
  Design Team Lead — *Fall 2019*
  Worked with a co-leader to plan and lead meetings for the design of rainwater catchment systems in Rwanda. Responsibilities include researching and working with the team to produce designs and CAD models to prepare for construction by students traveling to Rwanda.

- **BalloonSat** — CU Boulder
  Software Lead — *Spring 2018*
  Along with a group of six other students, worked throughout a semester to create a payload for a weather balloon that would utilize compressed CO_2 to stabilize its rotation as well as collect video and weather data. Responsibilities included programming in the Arduino language (C++), data visualization in Excel, and assisting with construction of the BalloonSat.