Evanston, Illinois

# Cameron Abplanalp

Madison, Wisconsin

cj.abplanalp@icloud.com

Website: cjabplanalp.github.io

(847) 868-5033

## Skills

**Programming Languages:** Python, R, Java, MySQL, bash, HTML/CSS, JavaScript
**Data Systems & Management:** pandas, Spark, Cassandra, Docker, Hadoop, Kafka
**Technical Skills:** Source and Version Control (Git/Github), Project Management (Atlassian Jira), Google Cloud Platform (VM instances, API applications), Building AI Models (PyTorch, TensorFlow, SciPy, numpy), Custom Environments (conda, venv), Excel, Tableau

## Projects

**Project Sample: Key/Value Storage Service** – Python, gRPC, Docker, OOP
**Overview**: Server/client storage service which stores randomly generated key/value (string, int) pairs in a dictionary via RPC calls from a simulated client to the designed server, deployed with Docker
  - ➤ Server inherits NumStore service containing two RPCs SetNum and Fact, which updates a key/value pair and computes the factorial of the value associated with the passed in key argument, respectively
  - ➤ Increased efficiency by use of a LRU cache structure (size = 10) which keeps recent slow computations so they don't recompute if passed in again
  - ➤ Implemented threading and locking to maximize efficiency of the client's communication with the server and the server's computing resources when request is received

*For more projects, please visit my website.*

## Work Experience

**Research Computing Facilitator Assistant** – *CHTC, UW-Madison*                         May 2022 - May 2024
(CHTC – Center for High Throughput Computing at UW-Madison – https://chtc.cs.wisc.edu/)
  - ➤ Closely collaborate with lead facilitator Christina Koch on tasks that manage CHTC's functionality in relation to user interactions, intra-center data flow, and integrating new processes into existing ones
  - ➤ Re-structure defunct, unorganized, and inefficient processes by implementing automating scripts, consolidating data sources, and standardizing all data handled by facilitation team
  - ➤ Test CHTC's HTC/HPC software *HTCondor* for processing bugs when handling GPU jobs and workloads
  - ➤ Develop Python scripts that automate the movement of data from a variety of HTCondor usage outputs to a methodically organized repository that can be accessed for further analysis on trends
  - ➤ Co-manage facilitation team Github repositories housing scripts, reports, raw and processed data, and more
  - ➤ Generate periodical reports by transforming raw data into presentable reports that relay usage trends broken down to the college, department, and individual user level for facilitation and funding team

## Education

**University of Wisconsin - Madison**                         September 2020 - May 2024
**Data Science (B.S.)** and **Information Science (B.S.)** with certificate (minor) in **Computer Sciences**
  - ➤ Changed major/career path from Biochemistry (Fall 2021)

## Coursework

**Relevant Coursework:** Calculus I-II, Java Programming I-III, Python Data Science Programming I-II, Data Modeling and Statistics I-II, Elementary Matrix and Linear Algebra, Applied Categorical Data Analysis, Introduction to Big Data Systems, Applied Database Design, Web Design for the Sciences, Introduction to Artificial Intelligence, Storytelling Through Data Visualization