

# ESTEBAN CHARRY

echarry@berkeley.edu ◊ (951) 783-7479

<https://escharry.github.io> ◊ <https://github.com/escharry>

## EDUCATION

---

University of California, Berkeley

*Fall 2020 - Fall 2023*

Bachelor of Arts in Data Science

### Relevant Coursework

- **Computer Science:** Structure and Interpretation of Computer Programs, Data Structures, Efficient Algorithms and Intractable Problems, Introduction to Artificial Intelligence, Introduction to Machine Learning, Discrete Mathematics and Probability Theory, Designing Information Systems and Devices I, II, Probability and Random Processes, Web Development
- **Data Science:** Foundations of Data Science, Principles and Techniques of Data Science, Human Contexts and Ethics of Data
- **Mathematics:** Multivariable Calculus, Statistics

## TECHNICAL SKILLS

---

Natural Languages

English, Spanish

Computing Languages

Python, Java, C++

## PROJECTS

---

**2048**

*January 2021*

Core logic of the game 2048, a single-player computer game written by Gabriele Cirulli, including the handling of a variety of possible key-presses input by the player and their effects on aspects of the game including score, board layout and tile values.

**Gitlet**

*March 2021*

Command line version control system implementing essential features of Git. Handles the reading and writing of files, viewing their histories, maintaining related branches of commits, and the merging of changes in one branch to another.

**2D Tile-based World Exploration Engine**

*April 2021*

Engine for generating random, expansive worlds in which the user is able to explore and interact. Worlds are generated using randomly positioned rooms and the connecting paths between them are made with A\* search using Manhattan distance as a heuristic.

**AI Pac-Man**

*January 2023*

Pac-Man projects which involve utilizing various AI methods to play Pac-Man. The main goal of these projects is not to create AI specifically for video games but to impart essential AI principles like informed state-space search, probabilistic inference, and reinforcement learning. Topics covered in these include search, logic, multi-agent search, reinforcement learning, Bayesian networks, and machine learning.

## DISTINCTIONS

---

Microsoft Technology Associate, Solar Cup 2020 Eco-Boating Competition, Questbridge National College Match Finalist, Great Minds in STEM 2020 Scholar, 2020 Chevron Scholarship Recipient