Bradley Cardona

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EDUCATION

ALLEGHENY COLLEGE
August 2019 - May 2023 | Meadville, PA
Major: Mathematics
Minor: Biology, Economics
Cumulative GPA: 3.59
Honors: Dean's List (2020-2023)

ALGOEXPERT | Certificate
Online Platform for learning data structures and algorithms
June 2022 - present | Meadville, PA
- Certificate of completion for completing 100 data structure and algorithms questions.

SYSTEMSEXPERT
Online platform for learning large-scale distributed systems
June 2022 - present | Meadville, PA
- Completed Systems Design Fundamentals course.

THE ODIN PROJECT
Open-source online coding curriculum.
January 2022 - present | Meadville, PA
- Completed multiple coding projects, several of which have been added to my Github account.

COURSEWORK

UNDERGRADUATE
- Linear Algebra
- Foundations of Mathematics
- Vector Calculus and Variables
- Probability/Statistic Inferences I
- Probability/Statistic Inferences II
- Optimization and Approximation
- Algebraic Structures I
- Introduction to Real Analysis
- Complex Variables

SKILLS

TECHNICAL SKILLS
Proficient with:
Python3 • Javascript (ES6) • Shell • HTML5 • CSS3 • Git • Github • LaTeX
Familiar with:
TypeScript • React / Redux • Node.js • C++

SOFT SKILLS
Strong:
Initiative • Resourcefulness • Grit • Communication

TECHNICAL PROJECTS

PATHFINDING VISUALIZER | Website, Github
Summer 2022 | Athens, PA
- Built VanillaJS application for visualizing search algorithms.
- Implemented Depth-First Search, Breadth-First Search, A* Search, Greedy Best-First Search, and Dijkstra's algorithm.

SORTING VISUALIZER | Website, Github
Summer 2022 | Athens, PA
- Built VanillaJS application for visualizing sort algorithms.
- Implemented Bubble Sort, Heap Sort, Insertion Sort, Quick Sort, and Selection Sort.

SUDOKU SOLVER | Website, Github
Summer 2022 | Athens, PA
- Built VanillaJS application for playing Sudoku.
- Implemented four board difficulties: easy, medium, hard, and impossible.

PORTFOLIO WEBSITE | Website, Github
Fall 2022 | Meadville, PA
- Built React website to showcase my current GitHub projects.
- Used GitHub's REST API to show automatically when update has been made to GitHub project.

INTERNSHIPS

ALLEGHENY MATHEMATICS DEPARTMENT |
Undergraduate Researcher
May 2022 – July 2022 | Meadville, PA
- Studied mathematics under the supervision of **Caryn Werner**. For this project, we explored systems of algebraic curves in the projective plane, a topic in algebraic geometry.

ALLEGHENY BIOLOGY DEPARTMENT |
Undergraduate Researcher
June 2021 – August 2021 | Meadville, PA
- Studied fruit flies under the supervision of **Bradley Hersh**. For this project, a green fluorescent protein (GFP) marker was attached to several candidate DNA regions from fruit flies to identify biological "switches" by which a gene is turned on or off.

AWARDS

THE CHEMICAL RUBBER COMPANY FRESHMAN ACHIEVEMENT AWARD | Website
May 2020 | Meadville, PA
- Awarded to one freshman student in recognition of outstanding scholastic achievement in chemistry.

TRUSTEE SCHOLARSHIP
Fall 2019 | Meadville, PA