

Minh Duong

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EDUCATION

University of California, San Diego 09/2022 – 06/2024

Bachelor of Science in Computer Science

Coursework: Data Structure, Object-Oriented Programming, Algorithms, Software Engineering, Artificial Intelligence, Machine Learning, Recommendation System and Data Mining, Data Science.

Awards: **Gold Medal** in the MapMyFuture project, surpassing 30 others.

Ohlone College 08/2019 – 06/2022

Associate of Science in Computer Science

(Highest Honor)

CERTIFICATIONS

Google Data Analytics (Coursera) 08/2024

Python for Data Science and AI (Coursera) 02/2024

Teaching Computation in the Digital World (Coursera) 12/2022

EXPERIENCE

Ohlone College Tutor Center 08/2021 – 05/2022

Academic Tutor

- **Collaborated** within a team of 3-4 tutors, **providing comprehensive support** and clarification on course content, assignments, and materials for introductory to advanced CS courses, ranging from basic principles to data structures.
- **Problem-solved** with students in helping students answer questions and challenges about C++ and Java from exercises, **leading** to increased student performance and confidence for more than 50 students each semester.

PROJECTS

[MapMyFuture](#) | *HTML, CSS, JavaScript, Git, GitHub*

- **Collaborated** with cross-functional teams of 10 members total to develop a user-centric Fortune Teller app, which includes code review to ensure high-code quality
- **Leveraged** Agile Development methodologies to efficiently manage project workflows, ensuring timely progression and robust tracking of project milestones.
- Achieved **Gold Medal** for the class out of 30 projects through **innovative** solutions and **effective** team coordination.

Graph | *C++*

- **Architected** a comprehensive Graph class in C++ integrating key graph attributes, efficient pathfinding algorithms, and robust connected component analysis; improved algorithmic performance, reducing computational overhead by **35%**.
- **Implemented** advanced algorithms such as Breadth-First Search and Dijkstra's Algorithm, resulting in a **40%** reduction in pathfinding computation time and improving overall system efficiency by **25%**.

AI-based Sudoku Solver | *Python, Git, GitHub*

- **Developed** a Python-based Sudoku solver incorporating constraint propagation, decision-making, and backtracking, enhancing puzzle-solving efficiency for complex puzzles.
- **Optimized** the Sudoku solver's reliability by incorporating advanced techniques, ensuring a **50%** reduction in processing time and seamless handling of **30+** complex test scenarios and challenging edge cases.

[Alphabetical Game](#) | *Java*

- **Led** a 4-member team to develop an intuitive GUI tailored for kids, resulting in a user-friendly interface that enhances engagement and learning.
- **Implemented** a competitive leaderboard and **advanced data structures**, optimizing performance and ensuring efficient management of in-game details.
- **Coordinated** team efforts and resolved technical issues through effective communication, ensuring timely project completion and a high-quality user experience.

SKILLS

- **Technical Skills:** Java, Python, C++, HTML5, CSS3, JavaScript, MySQL, MATLAB, Shell, Bash, CLI, LaTeX, Haskell, R
- **Tools Mastered:** Git, VSCode, Visual Studio, Jupyter Notebook, Eclipse, PyCharm, Microsoft Office
- **Operating Systems:** Windows, Linux (Ubuntu), Unix.