# DAMIÁN BROWNE

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#### **EDUCATION**

# **Loyola Marymount University**

Los Angeles, CA

Bachelor of Science, Computer Science · Minor: Economics · GPA: 3.63

May 2022

Awards & Honors: Arrupe Merit Scholarship (2018-22) • Dean's List • 2<sup>nd</sup> Place, LMU ACM Programming Competition (2020)

#### **Relevant Coursework**

Data Structures Algorithms

Artificial Intelligence Intro to Theory of Computation

Cognitive Systems Design Language Translation & Implementation

Affiliations: LMU Association for Computing Machinery (2019-Present) – Mentor for Computer Science Underclassmen and

Member, Technical Internship Hunt Club – Co-Founder, Co-President

# **SELECTED PROJECTS**

# FASim-NFAConverter – Intro to Theory of Computation Project

December 2020

- Implemented fundamentals of theory of computation to simulate construction and querying of finite automata in Java.
- Methodized conversion of nondeterministic finite automata to deterministic finite automata.

#### Blind Agent Maze Solver - Artificial Intelligence Project

October 2020

• Applied propositional logic inference and A\* algorithm in Python to program a "blind" agent (with imperfect information about its environment) to avoid obstacles and reach its goal.

# PuckSim - Model of Genetic Evolution - Personal Project

February 2020

- Visually modeled evolution and multi-generational genetic inheritance of fish-resembling agents in Java with the AWT library.
- Agents seek food using two methods, mate to produce offspring with inherited abilities and behaviors (with chance of mutation), and nurse offspring to adulthood.

# K'not! Origins - Online Game - Computer Programming Project

December 2018

- Created a one/two player top-down game in JavaScript with customized maps, textures, playable characters, and enemies/
- Utilized HTML, CSS, PHP, SQL, and MySQL to create a login/signup system and online high scores list.

# **WORK EXPERIENCE**

Praxis Design Build Santa Fe, NM

Construction Laborer

June 2015 – August 2020

- Built and renovated residences in Spanish-speaking environment over five summers for design-build firm in Santa Fe, NM.
- Applied and improved attention to detail, responsibility management, teamwork, and productivity.

LMU Intramural Sports Los Angeles, CA

Intramural Referee

September 2018 - November 2019

• Applied and improved communication, cooperation, and customer service skills in work-study job officiating intramural sports.

# **SKILLS**

Programming Languages Proficient In: Java, Python, JavaScript, HTML, CSS, NetLogo

Languages/Libraries with Experience In: SQL, PHP, C, Prolog; React.js, pandas, Python NLTK, Java AWT

Software: GitHub, MySQL, Microsoft Office, Adobe Photoshop & Premiere Pro, Google Drive, Windows, Mac OS, Linux

Languages: English, Conversational Spanish

# **OTHER ACHIEVEMENTS**

**High School Varsity Basketball** (2014-18) – Captain, 4x Varsity Letter, All-District 1<sup>st</sup> Team, Desert Academy Male Athlete of the Year, Team Statistician

**Danielle Steele Bingham Scholarship** (2017) – Awarded to a Desert Academy High School student embodying highest achievement and passion in mathematics