Luis "Louie" Maas

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EDUCATION

Northeastern University, Boston, MA

2021 - Present

Khoury College of Computer Sciences, College of Social Sciences and Humanities

Expected April 2025

Candidate for Bachelor of Science in Computer Science and Cognitive Psychology and Bachelor of Science in Philosophy, 3.63/4.0 GPA

Related Coursework: Algorithms and Data (Master's Level) | Object-Oriented Design | Logic and Computation

Fundamentals of Computer Science I and II | Artificial Intelligence | Discrete Structures

Networks and Distributed Systems | Fundamentals of Software Engineering

COMPUTER KNOWLEDGE

Languages: Java, JavaScript, HTML, CSS, LISP, Python, SQL, PHP, Liquid, Yang, Groovy, XML, Bash, Shell

IDEs: Visual Studio Code, IntelliJ IDEA, Jupyter Notebook, Spyder, Eclipse, Notepad++

Software: *Microsoft Office Suite, WordPress, GitHub, React*

RELEVANT EXPERIENCE

Software Developer Intern, Lumen Technologies

May 2024 - August 2024

- Collaborated in an Agile framework, participating in daily stand-ups to share work and resolve blockers.
- Managed and manipulated a database of FitNesse test logs using robust SQL queries.
- Migrated nightly Yang/XML FitNesse tests to new lab devices, ensuring code correctness and efficiency.
- Leveraged my strong background in algorithms and data structures to optimize memory usage and runtime of Groovy scripts, enhancing the performance of parsing service requests from network customers.

AI Software Development/Research Co-op, University of Perugia (Italy) September 2023 - December 2023

- Developed an R package for computing metrics of Distinctiveness Centrality, a metric to interpret graphical data, used in the Semantic Brand Score (SBS) Business Intelligence App which conducts semantic analysis.
- Published this package to CRAN, distributing the package to users in many R development environments.
- Optimized the SBS App's machine learning algorithms by implementing parallel processing strategies.

Lead Web Developer, Envision Exotics

March 2023 - September 2023

- Created an online shop for exotic car rentals in Miami, FL that is still in use today.
- Developed functionality for customers to reserve times and dates for specific cars in inventory.
- Designed infrastructure to handle payments, security deposits, e-signing of rental agreements, and intake/verification of driver's licenses and insurance information.

Software Engineering Intern, EMR Direct

June 2020 - September 2020

- Created web pages for customers to engage with our products in HTML/CSS/PHP.
- Worked with REST APIs to ensure the secure transmission of health information over a national network of hospitals and patients.
- Used REST APIs to make health records accessible in accordance with HL7 standards to doctors/patients.

PROJECTS

Photo Editing Software: Standalone Java program

May 2022 - June 2022

• Enabled users to perform many image manipulations, including resizing, applying filters (sepia, greyscale, blur, horizontal/vertical flips, etc.), and to save/load photos to/from the user's computer.

Connect Four AI: Python Connect Four AI player

February 2022 - March 2022

- Engineered a heuristic to determine the quality of a Connect Four game state for either player.
- Employed this heuristic in an A* depth-first search to compute the best possible move for the AI player, considering its opponent's best possible moves, to a specified depth of future turns.

BGP Router: Python code that simulates behavior of a BGP router inside a closed simulation **February 2024**

- Leveraged API functions such as select() and poll() to manage multiple sockets within my program.
- Built/managed forwarding tables, aggregated entries, manipulated IP addresses, deciphered subnet masks, and handled different types of messages to best direct network traffic between nodes.

INTERESTS

• Soccer, Music, Philosophy, Languages