RODRIGO VENA

rodrigo.vena.g@gmail.com | https://rodrigovena.com
Orlando, Florida. United States

OBJECTIVE

I am a Fulbright scholar and a master of computer science graduate with a keen interest in software engineering, program analysis, computational logic, and predictive analytics. I have strong skills in Java, Python, SQL and machine learning, as well as a solid work ethic, leadership, teamwork, and research skills. I am looking for a challenging and rewarding role in a reputable company where I can apply my skills and knowledge to create innovative solutions that enhance the quality and performance of their products.

EDUCATION

M.S., Computer Science, 08/21 – 05/23
University of Central Florida. United States

- Courses: Compiler Construction, Natural Language Processing, Computational Complexity, Algorithms and Data Structures for Strings and Sequences.

B.S., Computer Engineering, 09/15 – 06/19
Universidad Mayor de San Simón. Bolivia

- Courses: Agile Processes, Software Architecture, Software Engineering, Graph Theory, Web Programming, Modern Network Technologies.

AWARDS

Fulbright Scholarship, U.S. Department of State, 08/21 – Present

- Awarded a competitive and prestigious scholarship to pursue a master's degree in computer science at University of Central Florida.
- Received full sponsorship for employment and education in the U.S., including tuition, fees, living expenses, and travel costs.

Academic Excellence, Universidad Mayor de San Simón, 06/19

- Awarded to the top 5 students in the Department of Science and Technology.

RESEARCH

Researcher at APPLeSEEdLab, UCF, 04/23 – Expected end 08/23

Project: Corporate Entity Tracking Automation

- Creating and implementing graph algorithms in Python and Neo4j's Cypher to automate the tracking and analysis of corporate entities over time.
- Building a temporal graph calculus that generalizes and simplifies temporal graph management for corporate structures and reduces the complexity of common Cypher queries.

SKILLS

Concepts: Agile, Software Architecture, Data Structures, Algorithms, Design Patterns, Web Development.
Programming languages: Java, JavaScript, PHP, C#, C++, SQL, Python, Bash.
Frameworks and Tools: Visual Studio, IntelliJ IDEA, Spring, Laravel, ExpressJS, Git.
Databases: MongoDB, PostgreSQL, MySQL.
Operative systems: Windows, Linux.

PROJECTS

Laboratory Management System & VLE

- Description: Created a full-stack web app for managing laboratory activities and providing a virtual learning environment. Used command line operations for uploading, building, and deploying the project to a Debian server. Served as the scrum master for the team and configured the database.
- Technologies: PHP, Laravel, Apache, MariaDB, JavaScript, Angular, Git, JQuery, HTML/CSS.
- Link: https://gitlab.com/the-code-tellers/AdminLabo

Blind Dating Web App "Simon Dice".

- Description: Developed and designed a full-stack web app for blind dating, where users are matched based on their compatibility in music taste, philosophy of life, and other criteria. Implemented graph-based algorithms to calculate matches and relations between users based on their profile data. Served as the scrum master for the team and followed agile methodologies such as XP programming.
- Technologies: MongoDB, NodeJS, ExpressJS, Git, JavaScript, JQuery, HTML/CSS.
- Link: https://github.com/rndae/blinddate-app

Symbolic Execution of SimpleC Programming Language

- Description: Developed a program that performs symbolic execution of programs written in SimpleC language. Generated conjunctive normal form formulas that represent the possible paths the program could take; these formulas can be analyzed with a SAT solver.
- Technologies: Java, ANTLR, Bash.
- Link: https://github.com/rndae/symbolic-execution-clikelang

Recognition of Brand and Model in Product Titles

- Description: Built a BI-LSTM-CRF model to recognize brand and model names in product titles. The data to train and test the program was taken from the Amazon Berkeley Object dataset. Achieved high f-1 scores with Flair and spaCy for non-overlapping listings.
- Technologies: Python, RNN, Flair, spaCy, NER.

VOLUNTEERING

Organizer, Innovation and Entrepreneurship Clubs, JCI Tunari, Cochabamba, Bolivia,	01/20 – 12/20
Instructor, Programming with Python, at Isaac Attie High School, Cochabamba, Bolivia,	01/20 – 03/20
Instructor, Python Programming Workshop, at EMI University, Cochabamba, Bolivia,	09/19 – 10/19

ACADEMIC PRESENTATIONS

Probabilistic Graphical Models with Python. PyCon Bolivia – 2020 https://youtu.be/2QB5FwLw_EQ?t=3640

Scientific Computation with Python. PyCon Bolivia – 2020 https://fb.watch/j4-wC_4-i0/

Bolivia's Internet Infrastructure. UMSS – 2019 https://github.com/isumss/feriadeinternet2019