David Leal

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Computer Science Student | Python Certified | C++ Certified and
AWS and MIT Professional Education (certifications in progress)
Industry Experiences: Financial Institutions and Consulting Professional Services.

Co-Founder and Data Science Analyst

A dedicated undergraduate with the drive and skill set to excel in a fast-paced computer science environment. Versatile, develop relationships with clients, peers, and service integrator partners. Problem-solving and analytical thinking skills, a fast-learning curve, and the ability to adapt to evolving technological trends.

Core Competences

Machine Learning | Artificial Intelligence | Cloud Digital Technology Developments | Technology start-up partnership and managing new technologies solutions on-demand for direct and indirect clients | Proficient in English, Spanish, and French | Dual (USA-MEX) citizenship.

Experiences and Achievements

05/2025 – 08/2025   Macquarie Group LTD Houston, Texas

Position: Data Science Intern
Python, Machine Learning, Dataiku, R Studio, Excel, SQL, Data Analysis, Virtual Power Trading

Key Responsibilities and Accountabilities:
- Built machine learning models on multi-million-dollar virtual power trading datasets, improving profit strategies across the U.S. independent system operators
- Developed two full-stack Python applications that automated data ingestion & forecasting, reducing trader analysis time by 70%
- Published Dashboards that model the whole pipeline process from market renewable energy data to forecast day ahead predictions

Key Achievements:
- Developed two full-stack Python applications that handle large datasets from multiple independent system operators (ISO) that cover the United States power trading regions; resulted in improved data handling, data manipulation, volume adjustments, and data visualization
- Led power trader's efforts by analyzing virtual DART market datasets across all ISO regions in the U.S. and developed machine learning models on the dataset to determine the most impactful features on profit and losses; resulted in improved investment strategies and increased profit
- Created four dashboards that handle the pipeline process of integrating, cleaning, and filtering large datasets to incorporate them into a Python application that uses machine learning models as data to improve data modeling, data analysis, and trading decisions

08/2022 - Today   Almada-Digital LLC, Houston, Texas

Position: Co-Founder / Software Engineer/ Pre-Sales technical strategy
Enterprise system architecture design, scalable API development, cloud-native applications, and website digital solutions developer for client's digital transformation projects

Key Responsibilities and Accountabilities:
- Developed RESTful APIs and service layers for integration across internal and third-party platforms
- Develop new cloud solutions for the professional services industry
- Configured development environments and CI/CD pipelines to support rapid prototyping

Key Achievements:
- Developed applications with Python and React, featuring optimized database structures and API integrations that improved scalability and performance.
- Implementation of new Salesforce apps in the financial services (Bank)
- Implementation of digital payroll using HTML, CSS, and JavaScript (React)

Hands-On Projects

08/2025 - Today   **Entrepreneurial AI and Data Science Projects**

Purpose: To create an SaaS website hosting education in Computer Science concepts and to integrate AWS for scalable deployment and app building courses to bridge education, research, and monetization

- Stock Market ML Application**:** Stock prediction app using CatBoost, LightGBM, XGBoost, and Regression, integrating NLP and AI agents for financial market analysis
- AI-Powered SaaS Platform Design: Extended MIT coursework into developing a SaaS platform to host courses on machine learning, cloud architecture, data science, AI agents, and application development, integrating educational content with real-world applications
- Cloud Deployment of AI Systems: Leveraged AWS concepts to deploy end-to-end data science pipelines, enabling scalable web applications and dashboards
- Interactive AI Learning Modules: Built prototypes for course modules combining ML and data visualization, allowing users to interact with predictive models in real time

Education, Training, and Certifications

MIT Professional Education – Applied Artifcial Intelligence and Data Science (Certificate, In Progress)
- Apply AI and data science to solve real-world business problems. Covers the latest in Generative AI: NLP, RAG, Computer Vision, and Agentic AI for effective data representation and predictive modeling

Coursera - (C++ Programming), (Python for Data Science, AI, & Development), (Machine Learning with Python), and (Generative AI)
- https://www.coursera.org/account/accomplishments/certificate/7AA3NUZLE2VT
- https://www.coursera.org/account/accomplishments/certificate/K4ZBNV7RZRGT
- https://www.coursera.org/account/accomplishments/certificate/C27D5QGY4RG6
- https://www.coursera.org/account/accomplishments/certificate/M7NCSGDYH8ML

Sololearn - (Python Developer), (Data Programming) (18 hours per week/each)
- https://www.sololearn.com/en/certificates/CC-PJOQ1UIW
- https://www.sololearn.com/certificates/CC-RBA5MGSX

Key Courses: University of Houston
- MATH 3339 – Statistics for Sciences involves Graphical and descriptive methods in statistics, probability, random variables, and distributions. Programming R in R Studio, as well as being able to read and use Excel, is required for this course
- COSC 3337 – Data science concepts including exploratory data analysis, data visualization, statistical inference and modeling, machine learning, clustering, post-processing and interpreting results; Programming Python is a requirement for this course
- COSC 3360 – Operating system; sequential and concurrent processes, deadlock, mutual exclusion, semaphores; memory and processor management, and peripheral device management
- COSC 4368 – Fundamentals of Artificial Intelligence; Topics include search techniques, reasoning with logic, planning, decision making, machine learning, and robotics

Extracurricular
- Volunteered 8 hours at the annual event of Global Awareness Day
- Volunteered for (ESOL) English Speakers of Other Languages - interacted with groups of non-native speakers and helped them understand the cultures and values of America
- Water polo Junior Olympics (2018-2022)

References:
- Brian O'Neill – Macquarie Group U.S. Power Trader; Mobile: +1 (281) 740-3943
- David LeBlanc – Macquarie Group U.S. Power Trader; Mobile: +1 (713) 582-2378
- Gabriel Tovar – Deloitte Managing Director; Mobile: +1 (281) 685-1291
- Alonso Cueva – Accenture Senior Director; Mobile: +1 (469) 275-2249
- Jose Figueroa – Lundin Group CIO/CDO; Mobile: +1 (778) 957-7337