Andrew Macpherson

andrewmacpherson01@gmail.com | (714) 322-0669 | linkedin.com/in/macphersona | andrewmacpherson.dev

Skills and Qualifications

- Data scientist skilled in telling compelling stories from complex data that drive informed decision-making
- Expertise in business analysis, KPIs, and advanced reporting with Power BI, Tableau, and Microsoft Excel
- Highly skilled in Python for data analysis, machine learning, and big data processing
- Strong programming skills in SQL, C++, C#, JavaScript, & more
- Effective team player who can also lead projects independent with minimal supervision

Education

Seattle Pacific University – Seattle, WA
B.S. Computer Science; B.S. Physics; B.A. Honors Liberal Arts
Graduated June 2023

Relevant Experience & Projects

Flight Delay Prediction with Neural Networks   July 2025 - Present
Personal Project
- Building a PyTorch-based classifier to predict flight delays from real-world airline data
- Engineered categorical and one-hot embeddings for origin/destination/airline inputs
- Tuned model using ROC AUC, precision-recall, and TensorBoard visualization
- Automated pipelining via modular Python scripts including Selenium-based web data retrieval

Continuous Improvement/Quality Manager   December 2023 - Present
New-Indy Packaging, Los Angeles, CA
- Designed and built insightful dashboards for key stakeholders to facilitate data-driven decision making
- Automated reporting pipelines, reducing daily processing time by 50%+
- Developed automated financial modeling tools using Python and SQL
- Directly and indirectly managed dozens of individuals while routinely coordinating with other department heads and executive leadership, demonstrating strong leadership and effective communication skills
- Managed cross-functional teams and led inter-departmental operational efficiency initiatives

Associate Market Strategy Yield Analyst   July – September 2023
Southwest Airlines, Dallas, TX
- Utilized data analytics to examine historical performance and identify future revenue opportunities
- Implemented innovative revenue management techniques to enhance analytics performances
- Conducted an extensive market study to assess demand trends providing actionable insights

Computer Vision Deep Learning in Astronomical Image Classification   March 2022 – June 2023
Seattle Pacific University, Seattle, WA
- Award-winning project involving extensive interdisciplinary research at multiple universities
- Used deep learning techniques to develop framework for AI classification of astrophysical phenomena
- Downloaded in over 60 countries across all 6 continents

Graduation Planning Web App   September 2022 – June 2023
Seattle Pacific University, Seattle, WA
- Lead web engineer of a 6-person software development team creating a full-stack web application
- Developed innovative and technical tools to solve a need for Seattle Pacific University students
- 2023 Erickson Conference Award Winner

Inflight Operations Intern   June – September 2022
Frontier Airlines, Denver, CO
- Diagnosed and targeted operational inefficiencies to conserve and streamline company resources
- Performed extensive data analysis to enhance airline operations and corporate systems