RICARDO ELIAS ROCHE   reroche.github.io

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EDUCATION

Carnegie Mellon University
B.S. Statistics and Machine Learning
- **GPA**: 3.22/4.0

TECHNICAL SKILLS

Programming:
- **Python:** experience in performing data analysis and visualization (numpy, pandas, matplotlib), and working machine learning frameworks (scikit-learn, tensorflow)
- **R:** experience in processing data, applying statistical and machine learning models, visualizing the data (ggplot2), reporting insights and exporting to presentations and web apps (R Shiny).
- Familiar with **C**, **JavaScript**, and **SQL**.
Machine Learning: built classification, clustering, and regression models from scratch as coursework. Have implemented neural networks and deep learning models on real-world data.

EXPERIENCE

APS Technology   **Wallingford, CT, Summer 2017**
Data Science Intern in Quality Assurance
- Developed two database applications, using JavaScript, PHP, and the Quickbase API: one for automating the process of logging customer satisfaction issues, notifying relevant sales representatives and departments, and following up on and resolving the issues; and the other for automating the process of tracking hardware and software failures in company machinery, assigning investigations to relevant departments, mechanics, and/or developers, and implementing the fixes.
- Used Python to extract, clea, and analyze production data to create visualizations showing valuable insight for the production process.
Carnegie Mellon University — Department of Statistics and Data Science
Astro-statistics Research Trainee
- Analyzed data from the Catalina Sky Survey using tools in Python and R to find features of the data to distinguish different types of stars and transient objects.
- Use machine-learning models (random forests, support vector machines, k-nearest neighbors) to classify stars based on type.
- Designed a poster to illustrate analysis and findings, to be presented at the Undergraduate Research Symposium 2017.
Intelectum CA   **Caracas, Venezuela, Summer 2016**
Database Administrator
- Designed a central database (using SQL, PHP and JavaScript) combining customer relationship management (CRM) data, used daily for targeted sales to other businesses and aiding in customer retention.
- Maintained and backed up database on server.
- Developed user interface for working with employee performance data, whereby managers would rate the performance of their subordinate staff in a specific project.

ADDITIONAL INFORMATION

Certified UseClark Trainer (useclark.com)
Languages Spoken: English (native), Spanish (native), French (intermediate, 5+ years)