Hector Peña

hectorpena212@gmail.com |707.779.8931| linkedin.com/in/hector-penaalas | github.com/hpena212

EDUCATION

California State University, East Bay | Hayward, CA *Expected May 2026*

Bachelor of Science in Data Science, GPA: 3.8

Relevant Coursework: Statistical Inference, Intro to Data Science, Data Analysis with Python, Introduction to Data Visualization, Linear & Logistic Regression, Public Health Informatics, Probability through Simulation

Organizations: ColorStack member, 10,000 Degrees alumni, NSLS (The National Society of Leadership and Success)

Honors: PALiISaDS STEM Scholarship – Awarded a competitive $20,000 merit-based scholarship over two years for academic excellence in Data Science & Statistics

TECHNICAL SKILLS

Programming Languages: Python, R, SQL, C++

Tools & Technologies: Data Visualization, Data Cleaning, Statistical Inference & Testing, Exploratory Data Analysis (EDA), Correlation Analysis

Skills: Machine Learning (Logistic Regression, PCA, Neural Networks), Linear Models, Data Modeling, Data Integration, Data Analysis, Google Suite Proficiency, Excel Proficiency

PROJECTS

Credit Risk Assessment & Predictive Modeling for Loan Approvals | *Python, Jupyter* *November 2024*

- Designed a **risk assessment model** analyzing 1,000+ loan records, **boosting approval accuracy** and cutting defaults by 15%. **Built scalable data pipelines** in Python.
- Developed a **predictive modeling framework** analyzing loan data with **Pandas/NumPy**, improving approval accuracy by 12%.
- Conducted **correlation analysis** with **pandas.corr()** to **identify key repayment factors**, informing a **new credit scoring model**.
- Created visualizations **(Matplotlib, Seaborn),** of repayment trends, revealing 25% higher repayment for loans under $5,000, guiding a tiered interest rate strategy.

Customer Churn Analysis & Prediction | *MySQL, Python* *February 2025*

- Designed and executed a **comprehensive churn analysis** on 50,000+ customer records, **identifying key predictors** and reducing churn by 8%. Leveraged SQL to develop scalable data models.
- Developed a **predictive framework** utilizing queries, improving accuracy by 10% through the identification of high-risk customer segments.
- Conducted in-depth data analysis using SQL **joins, aggregations, and subqueries** to **uncover correlations** between customer behavior, demographics, and churn.
- Created **data visualizations** using SQL-generated insights, revealing a 30% higher churn rate among customers with low engagement, **informing targeted retention strategies**.

EXPERIENCE

Fulfillment Center Student Assistant *August 2024 – Current*
CSU East Bay Administration Offices | Hayward, CA

- Coordinate with counselors and 5+ academic departments to manage daily operations, meeting all deadlines and enhancing support services for over 10,000 students.
- Contribute to planning and logistics for student panels and outreach events attended by 200+ prospective students annually.
- Manage inventory and coordinate school merchandise and equipment logistics for large-scale events, supporting 15,000 prospective and active students