Adam Rychtecky

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OBJECTIVE:

Motivated Statistics and Data Science senior with research experience in machine learning and human-AI decision processes. Seeking admission to a graduate program in Data Science to deepen expertise in statistical modeling, machine learning, and applied research, while contributing to innovative projects and bridging data-driven methods with real-world problem solving.

EDUCATION:

University of California, Santa Barbara (UCSB)   June 2026
Bachelor of Science (B.S)

- Statistics and Data Science
- Psychological and Brain Science

SKILLS:

- Proficient in Python and R programming languages for data analysis, visualization, and statistical modeling.
- Familiarity with Microsoft Azure AI Fundamentals.
- Experience in database design and data manipulation in SQL.
- Strong background in research collaboration, data collection/processing, and scientific writing.
- Experience in a wide range of machine learning models, including regression, classification, clustering, natural language processing, time series forecasting, and deep learning.

EXPERIENCE:

EXECUTIVE RESEARCH ASSISTANT, Vision and Image Understanding Lab, Goleta, CA   January 2024-Present

- Conducted large-scale human psychophysics experiments, including simulated prosthetic vision studies and AI-human decision-making comparisons in visual perception tasks.
- Manage fellow research assistant duties, ensuring proper time management and project completion by deadlines.
- Coordinated participant testing sessions (calibration, task instructions, troubleshooting hardware/software).
- Attend lab meetings to stay informed on the latest research developments, contributing to discussions on ongoing projects and emerging methodologies.
- Implemented gaze-contingent and phosphene-rendered stimuli, ensuring reliable eye-tracking data collection.
- Collaborated with graduate researchers on experimental protocols, contributing to publications in vision and cognition.
- Organized and quality-checked datasets for statistical and machine learning analysis.

IT INTERN, UFCW Trust, Concord, CA   July 2024-August 2024

- Oversaw the upgrade of over 150 company laptops through the Windows Autopilot Program, installing software personalized to each employee.
- Maintained consistent communication with the manager, supervisor, and fellow IT employees to assess project progress and improve quality.
- Collaborated with colleagues to create a plan ensuring timely project completion, optimizing workflow to shorten the length of the project by 3 weeks.
- Documented serial numbers of both new and retiring hardware using Excel, ensuring proper data wipe as per HIPAA guidelines.
- Utilized Microsoft Office program to contact colleagues,

PROJECTS:

Gold, Growth, and Glory: Socioeconomic Drivers of Olympic Success

- Conducted economic analysis on the impact of GDP and population on Olympic medal counts.
- Built predictive models (Poisson, Zero-Inflated Negative Binomial) to quantify economic influences on performance.
- Applied K-Means clustering and PCA to segment countries by financial strength and athletic success.
- Demonstrated expertise in financial data analysis and statistical modeling using R.

IMDb Movies Dataset: Revenue Prediction Model

- Designed a financial forecasting model to predict global box office revenue based on production budgets, audience ratings, and votes.
- Used multiple linear regression, Box-Cox transformations, and stepwise variable selection to refine predictive accuracy.
- Performed outlier detection and financial trend analysis, highlighting key drivers of revenue success.