Ryan Marangattu

 github.com/mararva ryan.marangatwo.com https://www.linkedin.com/in/ryan-mara16/
ryanmarangattu@gmail.com

EDUCATION

California Polytechnic State University - San Luis Obispo   June 2026
B.S. Statistics / Minor in Mathematics

COURSEWORK

Courses: Multivariate Statistics, Linear Algebra, Linear Modeling, Graph Theory, Discrete Math, Game Theory, Calculus, Probability, Survey Sampling & Methodology, Mathematical Statistics, Statistical Learning

SKILLS

Languages: Python(pandas, NumPy, matplotlib), R(tidyverse, ggplot2), SAS, SQL, Minitab, LaTeX
Tools: Git/GitHub, RStudio, PowerBI, Tableau, MS Office Suite(Word, PowerPoint, Excel), Google Suite

EXPERIENCE

Data Analyst | *Arch Machining, Canoga Park, California*   Jun 2024 - Sep 2024
- Sorted and analyzed large amounts of raw data for company archives using Python, resulting in a 75% faster retrieval time.
- Played a key role in budget management activities, assisting in budget preparation and monitoring expenses.
- Created charts and graphs using Tableau to illustrate production per day.
- Programmed a new sorting system for coworkers to upload project files that was intuitive to users unfamiliar with computers.

University Housing Student Lead | *Cal Poly, San Luis Obispo, California*   June 2023 – September 2023
- Assisted employees in verifying time sheets for 100+ workers and payroll data using Excel.
- Worked with the housing department to plan and execute move-in procedures for over 8,000 students living on campus.
- Managed supply inventory and maintenance requests to ensure optimal living conditions across dorm facilities.

STATISTICAL PROJECTS

Colonel Blotto Game | *R, RShiny*   February 2026
- Built an interactive web application in R Shiny simulating the Colonel Blotto resource-allocation game, including weighted battlefields and real-time outcome visualization.
- Implemented a computer opponent using randomized and adaptive strategy selection to approximate mixed-strategy play without hard-coded solutions.
- Integrated client-side audio feedback and UI state updates using Shiny's JavaScript messaging system.

Survey of Cal Poly student employees' employment experiences | *R, SAS*   December 2024
- Conducted a comprehensive survey to examine the various competencies students expected to develop over the course of their employment at Cal Poly, to report to the Student Affairs department.
- Cleaned the collected data using SAS and generated charts using the tidyverse package in R.
- Presented the process of collecting and conclusions of our survey to an audience of clients and others unfamiliar with statistics.

Analyzing the total sugar content of four varieties of juices | *JMP Pro 16*   May 2023
- Conducted a thorough analysis of the total reduction content of multiple juice varieties.
- Collected samples of four juice flavors of a specified brand, preparing and analyzing them according to protocols to determine the exact reduction content.
- Utilized statistical analysis in JMP Pro 16 to identify variations in reduction levels among the different juice varieties.