

JEFFREY JOHNSON

Escondido, CA (Open to relocation) | 760-586-4444 | jeffjohnson18@gmail.com

Portfolio: jeff-johnson-portfolio.vercel.app

Baseball analytics professional with experience in player evaluation, advance scouting, and data-driven decision support at both collegiate summer ball and Major League levels. Skilled at integrating video, scouting reports, and advanced data sources (TrackMan, Statcast, Synergy) into actionable insights for coaches and front offices. Developed scouting reports, postgame pitcher evaluations, and opponent strategy cards that directly informed game planning. Proficient in Python, SQL, R, and Tableau, with a strong foundation in player valuation, predictive modeling, and contract analysis.

EDUCATION

GRAND CANYON UNIVERSITY

Phoenix, AZ

Bachelor of Science in **Software Development**, Minor in **Business Analytics** (3.5 GPA)

Graduated: April 2025

- **Honors:** Undergraduate Certificate of Completion in Java Programming, C# Programming
- **Relevant Coursework:** Data Structures and Algorithms, Database Design & Development, Advanced Programming in C#/Java, Cloud Computing, Business Statistics, Applications of College Algebra, Operating Systems Fundamentals, Application Security Foundations, IT Project Management
- **Certifications:** Baseball Analytics Course (Sports Management Worldwide) | R for Data Science: Analysis and Visualization (LinkedIn)

PROFESSIONAL EXPERIENCE

Baseball Data Analytics Intern – Corvallis Knights Baseball Club (April 2025 - August 2025)

- **Delivered Python-based daily postgame pitcher reports** that evaluated pitch usage, zone performance, and batted-ball outcomes, directly supporting coaching staff adjustments.
- **Created run and shift cards** by analyzing **opponent speed, spray charts, and baserunning tendencies**, enabling **defensive alignments** tailored to in-game situations.
- **Converted raw TrackMan batted ball data** (exit velocity, launch angle, spray angle) into **expected outcomes** using **Python models**, isolating skill-based performance metrics.
- **Synthesized Synergy and TrackMan data** to build advanced scouting reports, focusing on **pitch sequencing, hitter weaknesses, and spray patterns**.
- **Collaborated with coaches and front office** to translate advanced statistical models into **actionable insights**.
- **Tagged and categorized 500+ pitches** and defensive alignments using Synergy, helping coaches **visualize and review game film** with specific situational context.
- **Operated TrackMan** during games to ensure real-time capture of **velocity, spin rate, and movement** data, enhancing **development workflows**.
- **Analyzed platoon splits, bullpen usage, and historical matchup data** to deliver pre-series strategy recommendations.
- **Conducted detailed pitcher scouting** to identify pitch tells and tendencies by reviewing video and pitch sequencing data, providing actionable insights that helped predict opponent strategy.
- Measured baserunning “time to plate” and lead-off distances by **analyzing game footage** and tracking data, informing run prevention strategies and defensive positioning.

Operations Assistant, Spring Training – San Diego Padres (February 2024 – April 2025)

- **Charted evaluation data for Padres pitching staff** during Spring Training, producing reports used by coaches and analysts to guide player development decisions.
- **Coordinated logistics** for over **100 players, coaches, and staff** during Spring Training and the MLB Korea Series by managing transportation schedules, facilitating smooth field transitions, and distributing credentials, which ensured **seamless daily operations** under tight timelines.
- Delivered **200+ VIP tickets and credentials** with **100% accuracy**, enabling timely and secure access for families, MLB executives, and guests, supporting flawless event execution.
- Supported **Major League and Minor League hitters and staff** by catching live batting practice and assisting with daily on-field operations.
- Transported players and staff via golf cart and van between practice fields, games, and airport arrivals/departures, ensuring on-time, safe arrivals that optimized team schedules.
- Led engaging facility tours for clients, VIPs, and corporate guests, demonstrating professionalism and communication skills that enhanced organizational reputation.
- Assisted with **special event preparations**—including Family Day and the Wives’ Brunch—by organizing facilities and coordinating supplies, enabling successful event execution.
- Provided clerical and **administrative support** during peak times at the front desk, improving guest service and internal communication flow.
- Unloaded shipments, stocked inventory, and refueled rental cars, maintaining operational readiness and minimizing downtime for team logistics.
- Represented the San Diego Padres professionally in all guest- and player-facing interactions, consistently promoting a positive organizational image.

Information Technology Support Specialist – GCU Tech Support (May 2023 – Feb 2024)

- Resolved **500+ technical support tickets** through **Zendesk**, maintaining a 99% resolution rate across students, faculty, and staff.
- **Diagnosed and fixed issues** related to **Windows OS, Microsoft Office, CRM tools**, and campus software, both remotely and in-person.
- Delivered **empathetic, real-time support** via phone, email, and chat, helping users solve problems under pressure.
- Documented **issue-resolution workflows** and contributed to internal guides, improving long-term efficiency and onboarding.
- Triageed **complex cases** and escalated appropriately, ensuring user concerns were addressed promptly and thoroughly.

PROJECTS

The Mound Report: 2025 MLB Pitcher Scouting Reports using Statcast Data (TheMoundReport.com)

Dynamic Web Platform Using Python, Next.js

- Built a comprehensive **web scouting platform** to evaluate professional pitchers using pitch-level Statcast data, heatmaps, and zone-specific performance.
- Developed **LHH/RHH-specific heatmaps**, pitch-type usage breakdowns, and zone-based performance visualizations to support advance scouting and game planning.
- Automated **data ingestion pipelines** from MLB APIs to ensure daily updates of visualizations and stats, reducing manual workload and enhancing report reliability.
- Engineered a dynamic frontend using **Next.js and React**, delivering responsive performance and interactive visuals across devices.
- Deployed the platform at **TheMoundReport.com**, reaching coaches, analysts, and fans with actionable, real-time pitcher insights.

MLB Win Totals Prediction Model

R Statistical Analysis & Machine Learning

- Built a predictive **linear regression model** to estimate MLB team win totals based on historical offensive and defensive metrics from 2010 onward.
- Engineered features from the **Lahman dataset**, including runs scored (R), hits (H), home runs (HR), and runs allowed (RA) for use in modeling.
- Evaluated variable significance and refined the model by removing statistically insignificant predictors (e.g., SO, X2B, X3B), improving interpretability and performance.
- Generated win total predictions using `lm()` and added results directly into the cleaned dataframe for visualization and evaluation.
- Assessed model accuracy by calculating **Root Mean Squared Error (RMSE)** and visualizing predicted vs. actual wins using **ggplot2**.
- Explored historical trends in run scoring by year, plotting **MLB-wide average runs per game** over time to contextualize team performance.
- Leveraged `dplyr` and `tidyr` for data transformation, filtering, and cleaning across 15+ seasons of team-level MLB statistics.
- Designed the project to demonstrate practical **data science applications in baseball forecasting**, with potential uses in front office planning and betting markets.

Scoutbase - Mobile App Prototype for High School Baseball Players to Earn Scholarships

Senior Capstone Project using Django (Python), React Native (JavaScript)

- Designed and developed a **web-based platform** to connect high school baseball players with college coaches and scouts, addressing inefficiencies in the athletic recruiting process.
- Built a secure **Django REST API backend** to manage user authentication, athlete profiles, stats, highlight videos, and coach search functionality.
- Developed a **React Native frontend** for mobile devices, enabling athletes to create and update profiles and coaches to filter recruits by key attributes (e.g., position, height, school).
- Utilized **Heroku-hosted MySQL database** with full CRUD support, applying cloud-based persistence while keeping infrastructure cost-effective.
- Implemented **JWT-based authentication** and role-based access control to protect data and restrict platform features by user type (athlete, coach, scout).

Minesweeper Web App

C# .NET MVC / SQL SERVER / ASP.NET Identity

- Architected a **relational SQL Server database** to support user profiles, saved game states, and detailed gameplay statistics.
- Implemented **user authentication and authorization** using ASP.NET Identity with secure password hashing and role-based access.
- Enabled **save/resume functionality** by tracking individual cell states, elapsed time, and board layout using normalized database tables.
- Built a **game statistics system** recording win/loss records, average completion time, and total games played by difficulty level.

SKILLS AND TOOLS

- **Programming & Modeling:** Python (pandas, NumPy, scikit-learn, matplotlib), R (tidyverse, ggplot2, caret), SQL, Java, C#, JavaScript/TypeScript
- **Statistical Methods:** Regression, Classification, Bayesian Methods (Stan, PyMC), Neural Networks, Time-Series Forecasting, Machine Learning
- **Data Engineering & Tools:** Data Cleaning, Git, Tableau, R Shiny, Excel (advanced), Visualization (ggplot2, matplotlib, seaborn)
- **Cloud Platforms:** AWS, Google Cloud, Azure, Heroku
- **Baseball Systems:** Statcast, TrackMan, Synergy, Lahman Database, PyBaseball, BaseballR