Ethan K. Long

S. Boston, MA | (617) 449-8371 | ethan.long@uconn.edu

Highly motivated and detail-oriented aspiring data scientist with a strong foundation in statistical analysis, machine learning, and programming. Seeking an internship in data science, statistics, or analytics to apply technical skills, manage complex datasets, and deliver actionable insights while contributing to data-driven decision making.

Education

University of Connecticut | Storrs, CT   Expected May 2026
Bachelor of Science in Statistics
Courses: Statistical R Programming, Intro to Data Science, Regression Analysis of Experiments, Big Data Analytics, Computer Science, Information Systems and Technology

Technical Skills

Programming & Software: Python, R, SQL, SAS
Data Visualization Tools: Tableau, Excel, Minitab, ggplot2
Data Analysis & Machine Learning: Regression, Hypothesis Testing, Predictive Modeling, Feature Engineering
Data Processing: Data Cleaning, Web Scraping, ETL Pipelines

Experience

UConn Student Recreation Center | Storrs, CT   January 2025 – Present
Operations Assistant
- Plan and execute events, programs, and activities, contributing to increased student engagement and participation.
- Coordinate daily operations within the Recreation center, ensuring seamless function and optimal member experience.
- Analyze and report on facility usage metrics, providing data-driven insights for strategic planning.

UConn Men's Club Ice Hockey Team | Storrs, CT   September 2023 – Present
Financial Assistant
- Managed a $55,000 budget, ensuring efficient financial planning and allocation for travel, equipment, and team expenses.
- Coordinate with representatives from various teams to design and optimize practice, game, and travel schedules.

City of Boston | Boston, MA   May 2024 – August 2024
Lifeguard
- Ensuring patron safety by monitoring swimming areas and enforcing facility regulations.
- Conducted routine inspections of swimming areas, water quality, and equipment adhering to health and safety regulations.
- Led elderly water aerobics classes, tailoring routines to varying fitness levels and promoting health.

The Salty Dog | Boston, MA   May 2023 – August 2024
Barback/Host
- Supported bartenders during peak hours by preparing drink ingredients and ensuring cleanliness of bar.
- Maintained bar efficiency by restocking supplies and assisting during peak hours.

YMCA of Huntington Ave | Boston, MA   May 2018 – August 2018
Senior Staff Member
- Planned, coordinated, and executed engaging camp activities, including team-building exercises, outdoor games, and educational workshops, tailored to various age groups.
- Conducted regular training and professional development sessions, providing feedback to coworkers.

Academic Projects

NYC Crash Data Analysis

- Cleaned and processed over 500,000 crash records using Python (Pandas, NumPy), reducing data inconsistencies by 95% and improving data processing speed by 40%
- Applied statistical methods, including hypothesis testing and correlation analysis to identify top 5 key factors contributing to over 80% of NYC traffic accidents.
- Developed interactive dashboards in Tableau to communicate insights effectively, enabling stakeholders to make data-driven decisions on traffic safety improvements.

Professional Baseball Regression Analysis

- Scraped and cleaned 60,00 MLB player statistics from multiple databases, preparing structured datasets for detailed analysis.
- Built a Python-based regression model (SciPy, Statsmodels) with a R^2 score of 0.80, accurately forecasting player performance for the 2023 & 2024 MLB seasons.
- Identified key player performance metrics that contributed to over 80% of variance in player performance.

Loan Approval Predictive Model

- Extracted and consolidated 700,000 mortgage application records from publicly available Department of Housing and Urban Development (HUD) datasets.
- Improved loan approval prediction accuracy by 27% using stepwise regression in R, outperforming baseline models by 15%.

Machine Learning Stock Market Performance Algorithm

- Designed and implemented a supervised learning algorithm in Python (scikit-learn, TensorFlow) to analyze and forecast S&P 500 stock performance, processing over 20 years of historical data.
- Enhanced model performance with hyperparameter tuning and feature engineering, improving predictive accuracy by 18% over baseline models.

Extracurricular Activities

- UConn Men's Club Hockey Team
- UConn HuskyTHON Fundraiser
- Joint Statistical Club
- Data Science Club
- UConn Pickleball Club

Volunteer Activities

- Learn-to-skate volunteer – DCR Murphy Memorial Rink | South Boston, MA
- Food Pantry Helper - St. Mary's | Berlin, CT