Jeremy Kozlowski

EDUCATION

California Polytechnic State University

Master of Science — Computer Science

Bachelor of Science — Computer Science, GPA: 3.98

San Luis Obispo, CA

Sep. 2023 - Dec. 2024

Sep. 2020 - Dec. 2023

Relevant Coursework: Algorithms, Data Structures, AI, NLP, Data Science, Programming Languages, Databases, Operating Systems, Systems Programming, Object-Oriented Programming, Computer Security, Software Engineering

Awards and Honors: President's Honors List (2020, 2021, 2022), California Seal of Biliteracy, Dean's List (9 quarters)

TECHNICAL SKILLS

Languages and Tools: Python, C, Java, SQL, Racket, Pandas, NumPy, TensorFlow, Scikit-learn, Git, Unix, ARM Other Coursework: Calculus IV, Modern Physics, Statistics, Linear Analysis, Technical Writing

Work Experience

Air Force Civilian Service — Hill AFB, UT

June 2023 – Aug. 2023

- \bullet Improved the accuracy of the language model for a physical chatbot by 57% with an LSTM network
- Produced a comprehensive test suite and report to advocate for the adoption of my model over the existing one
- Created a presentation to educate over 30 department members on various machine learning topics including neural networks

Computer Science Teacher — San Luis Obispo High School

June 2022 – July 2022

- Developed and taught a computer science curriculum for 150 elementary and middle school students
- Presented topics including project design, computer systems, artificial intelligence, debugging methods, and game physics

Data Structures Teaching Assistant — Cal Poly, San Luis Obispo

Jan. 2022 - Mar. 2022

- Assisted students on labs and projects and guided them towards better coding habits
- Helped students implement and apply fundamental data structures in Python
- Reinforced concepts of recursion, time complexity, sorting algorithms, and unit testing in students

Website Developer — Sacramento, CA

Aug. 2021 - Nov. 2021

- Designed web pages for a client through WordPress
- \bullet Collaborated with team members and the client to congregate existing websites into one

PROJECTS

Image Captioning AI | Python

Oct. 2023 - Dec. 2023

- · Built an image captioning model using the BLIP architecture and adjusted model hyperparameters during validation
- · Applied the model to aid accessibility and assist in human search and rescue attempts in conjunction with other researchers
- Compiled report with quantified results using generated text metrics such as bleu, rouge, and meteor scores

MLB Player Success Predictor | Python

Oct. 2023 – Dec. 2023

- Predicted career success of MLB players based on their rookie season statistics using a stacking ensemble model in Scikit-learn
- Wrote a Python script to scrape and clean multiple Baseball-Reference player pages using Pandas and Beautiful Soup
- Optimized hyperparameters using 10-fold cross-validation and GridSearchCV while also adjusting features and algorithms

Stellar Classification | Python

Apr. 2023 – Dec. 2023

- Applied various machine learning algorithms to classify stellar objects from observational properties
- · Compared kNN, neural network, SVM, Naive Bayes, decision tree, and random forest model results
- · Incorporated a clear interface for physicists and astronomers to use the highest accuracy model for efficient classification

NBA Wins Predictor | Java

Mar. 2023

- Projected wins in the 2023 NBA season based on player statistics using k-nearest neighbors built from scratch
- Determined the hyperparameter k using 10-fold cross-validation on the training set to produce accurate results
- Extended code to modify feature selection, distance methods, and error calculations to discover the most suitable approaches

Tape Archiver $\mid C$

Feb. 2022

- Replicated Unix tar tool to support the creation, extraction, and listing of files in USTAR format
- Utilized recursive directory traversal functions to aid in the organized creation and extraction of entire file trees
- · Preserved permissions and file metadata throughout transport to retain properties for verbose file listing

ORGANIZATIONS

Sigma Phi Delta: Professional Engineering Society — Brotherhood Chairman

Nov. 2021 - Present

• Organizing events for 50+ members to build connections and form meaningful relationships

Hands for the Homeless — Vice President/Treasurer

Aug. 2018 - Jan. 2021

• Raised 1,844 dollars for a Sacramento homeless shelter by tutoring students in our community for voluntary donations or free

• Ensured members were attaining monthly goals and was responsible for collecting and donating money members raised