Ryne Dean Acheson

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EDUCATION

University of Maryland, College Park, MD

GPA: 3.86 | Dean's List | 2x Academic All-Big Ten

Bachelor of Science, Computer Science. Concentration: Machine Learning

Anticipated: Winter 2025

Relevant Coursework: Design and Analysis of Computer Algorithms, Applied Statistics, Intro to ML,

Object-Oriented Programming, Advanced Data Structures, Intro to AI, Linear Algebra, Data Science, Discrete Structures

PROJECTS

Sudoku Generator and Solver (Python, HTML, CSS, Flask)

March 2024 – May 2024

- Utilized Arc Consistency Algorithm and Minimum Remaining Value and Least Constraining Value heuristics to optimize Sudoku constraint satisfaction problem
- Implemented more efficient algorithm, reducing the number of moves required by up to 98.74% and optimizing the time complexity from O(9^81) to O(n^2)
- Authored extensible code, compatible with the "Knight's Rule" restriction

NFL Dataset Analysis (Python, TensorFlow, Pandas, Numpy, Git, Matplotlib) February 2024 – May 2024

- Collected, processed, and analyzed weekly and yearly data from 2012-2022 NFL dataset
- Applied ML techniques (Random Forest, K-NN, Neural Network) to classify and predict a running back's rushing yard output
- Created insightful data visualizations using Seaborn and Matplotlib to effectively communicate complex data insights to professors and peers

SECU Case Competition (3rd place, Python, Pandas, NumPy, Jupyter Notebook)

April 2024

- Proposed data-driven business solutions to SECU executives to increase student membership by 2500 through exploratory data analysis using Pandas and NumPy on a dataset of 50+ UMD student interviews
- Collaborated with three peers and a mentor to develop a project timeline, delegate tasks, and incorporate iterative feedback, ensuring deliverables were completed on time for competition deadlines
- Competed versus 20+ other teams, achieving 3rd place

INTERCOLLEGIATE ATHLETICS

University of Maryland - College Park, Division I Men's Football Team

March 2023 - Current

- Academic All-Big Ten 2023, 2024 (1 of 2 CS Student-Athletes @ UMD)
- George Boutselis Memorial Award Letterman with Highest Academic Average
- Dedicated 30+ hours per week to training, practice, and games while maintaining a full CS courseload
- Effectively collaborated and communicated with a diverse set of teammates and coaches to ensure certain goals are met through high levels of dedication and work ethic

WORK EXPERIENCE

Market Concierge, Central Farm Markets, Bethesda, MD

January 2022 – August 2022

- Organized market of 50+ vendors and 2000+ customers
- Responded to 20+ customer inquiries per hour
- Responsible for the collection of 10 pallets of produce per week to be donated to local food shelters

LEADERSHIP / ORGANIZATIONS

Alpha Kappa Psi Business Fraternity (Member, Cohort Vice President)

February 2024 – Current

TECHNICAL SKILLS & INTERESTS

Programming Languages: Java, Python, JavaScript, C, SQL, HTML/CSS, R Learning: C++

Frameworks/Libraries: NumPy, TensorFlow, Pandas, Flask, JUnit, Learning: Django

Tools/Platforms/Other: Git, GitHub, VS Code, PyCharm, Eclipse, Jupyter Notebook, RESTful APIs

Interests: Crossword Puzzles, Sudoku, Sports, Exercising, Hiking, Cooking, Rock Climbing