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EDUCATION

Williams College, Williamstown, MA | GPA: 3.94 (Major) / 3.88 (All) June 2025 Bachelor of Arts in Computer Science;

Selected Coursework: Deep Learning, Natural Language Processing, Machine Learning, Causal Inference, Probability, Linear Algebra, Operating Systems, Computer Graphics, Robotics, Algorithms & Analysis, Data Structures.

Honors: Williams College x Mysten Labs Hackathon 1st Place, Class of 1960 Scholar of Computer Science, Ward Prize Nomination, Dean's List

TECHNICAL SKILLS

Programming Languages: Python, C/C++, JavaScript / TypeScript (Proficient) | R, Go, Java, Shell, Move, SQL, F# (working knowledge)

Tools: Torch, Tensorflow (Keras), Scikit-learn, OpenCV, Hydra (AI/ML) | React, AWS S3 / & R53, Node, Git, Ab Initio, CSS (Development) | Snowflake, Postgres (Database) | OpenGL, GLSL, x86, LaTeX, .NET (Other)

PUBLICATIONS

SPIDER: Improved Succinct Rank and Select Performance

M. D. Laws, J. Bliven, K. Conklin, E. Laalai, S. McCauley, and Z. S. Sturdevant Symposium on Experimental Algorithms (SEA), 2024. [[arXiv](#)] [[LIPIcs](#)]

SELECTED PROJECTS

ASL Interpreter: Developed a computer vision model that identifies ASL letters. Attained 97% accuracy for letters and 95% accuracy for words. Ships with a live video recognition feature for real time translation.

NHPT Evaluation: Developed a prototype computer vision system for automatically evaluating patient performance on the Nine Hole Peg Test (NHPT) via video. The NHPT is one of the most widely used arm mobility tests in clinical practice.

Causal Feature Finding: Developed an easy to use framework for pruning feature spaces when training ML models using Causal Inference. Improved test accuracy by up to 50% when reducing feature space by more than 50%.

Williams College Rugby Website: Developed a website for the Williams College Rugby Team from scratch using React and hosted through AWS s3 @ williamscollegerugby.com.

Snar Delivery: Developed a web3 food delivery service like DoorDash on Sui Move. Hosted @ snar-delivery.vercel.app.

SOFTWARE EXPERIENCE

Sanofi, Cambridge, MA, *Data Scientist Intern* May 2024 - August 2024 • Worked in the ML / AI team as a Data Scientist to leverage computer vision techniques in the clinical setting • Contributed a framework for evaluating the NHPT to Sanofi's growing library of tools.

Williams College, Williamstown, MA, *Computer Science Research Fellowship* June 2023 - May 2024 • Work with Professor Sam McCauley to develop a faster Succinct Rank and Select Data Structure • Developed theoretical algorithms, implemented, and optimized them in C • Presented my research in a talk at the Symposium on Experimental Algorithms 2024.

Integral Ad Sciences, New York, NY, *Data Engineering Intern* June 2022 - August 2022 • Worked in a team of 4 using the Agile methodology to develop a regression testing software IAS's twitter brand safety pipeline.

Williams College, Williamstown, MA, *Teaching Assistant* Sept 2022 - Present • Host 3 TA sessions a week to help students with lab assignments • Current Deep Learning TA and have TAed Computer Organization and Data Structures in the past.

Williams Students Online (WSO), Williamstown, MA, *President / Lead Developer* June 2024 - Present • Maintain full stack codebase for student website and mobile app used by 2000+ students and faculty.

LEADERSHIP EXPERIENCE

Williams College Rugby Football Club (WRFC): Captain May 2024 - Present

Williams Record, *Website Editor* Jan 2024 - Present

Williams College Junior Advisor Program: Junior Advisor May 2023 - May 2024