Adam J. Wathieu

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EDUCATION

Northwestern University, Weinberg College of Arts and Sciences, Evanston, IL   August 2020 – May 2022
Major: Computer Science (B.A.), Mathematics (B.A.)   GPA: 4.00
- Dean's List: [Fall 2020]

Georgetown University, Georgetown College, Washington, D.C.   August 2018 – May 2020
Major: Computer Science (B.S.), Mathematics (B.S.)   GPA: [Cumulative: 3.92, CS: 3.96, Math: 4.00]
- Semester First Honors: [Spring 2020, Fall 2019, Spring 2019], Semester Second Honors: [Fall 2018]

SELECT WORK EXPERIENCE

USC Viterbi School of Engineering, Department of Computer Science   May 2020 – August 2020
NSF REU – Visiting Research Assistant (PI Maja Matarić) - Robotics and Autonomous Systems
- Developed pipeline that processes learning from demonstration data from a human robot interaction, and applies machine learning algorithms to develop a behavior tree model for robot control policy
- Learned ML and data analysis topics, such as lag feature handling, upsampling, hyperparameter tuning, pruning, etc.
- Worked with XGBoost and Scikit-learn ML libraries, and learned C5.0, CART, and extreme gradient boosting algorithms
- Continuing as a volunteer to work on paper writing process ahead of 2021 conference
- Documentation: https://hackmd.io/XWvaVyFsRri8MbmYuUs46w

Georgetown University, Department of Mathematics and Statistics   January 2020 – May 2020
Teaching Assistant (Professor David Caraballo) – Calculus III
- Assisted over 60 students learning multivariable calculus (MATH 137)
- Taught concepts such as higher-order partial derivatives, triple integrals in various coordinate systems, etc.
- Held office hours 3 times a week and graded homeworks and quizzes
- Lead two recitation sections, each of length 50 min and with 20 students

Georgetown University, Department of Computer Science   August 2019 – May 2020
Teaching Assistant (Professor Willis A. Woods) – Introduction to Computer Science I and II
- Assisted over 100 students learning C++
- Held office hours 5 times a week and graded homeworks, quizzes, and projects
- Taught concepts such as OOP, searching/sorting algorithms, linked lists, big Oh notation, operator overloading, etc.

Nat. Inst. of Standards and Technology (Department of Commerce), Gaithersburg, MD   May 2019 – August 2019
NSF REU - Summer Undergraduate Research Fellow (PI Joe Falco) - Manipulation and Mobility Systems Group
- Developed a standard test method for determining work volume of robotic hands and manipulators
- Developed a desktop application that computes several measures of volumetric capability given the specs of a robotic hand
- Learned MatLab, forward kinematics mathematics, and gained familiarity with robotic manipulator hardware and software
- Repo: https://github.com/adamwathieu-bit/manipulator-work-volume, Documentation: https://tinyurl.com/ydauqd3p

Nat. Inst. of Standards and Technology (Department of Commerce), Gaithersburg, MD   July 2017 – August 2017
Volunteer (PI Kamel Saidi) – Robotics Test Facility
- Worked with two other students to implement LiDAR- guided autonomous stopping in a Quadcopter Drone. Used 3D printing to properly mount the LiDAR sensor onto the drone.
- Abstract: https://tinyurl.com/yxclaphc, Documentation: https://tinyurl.com/y4f3c4rx

TECHNICAL SKILLS AND OTHER

Skills: C++, Java, MatLab, R, Python, C, HTML, CSS, JavaScript, Eclipse, XCode, Bash, Doxygen, Latex, Excel, 3D printing, Git, Linux, Raspberry Pi, Arduino, Forward Kinematics Mathematics

Activities: Northwestern Formula Racing, Georgetown University Technology and Engineering Club (Member), Georgetown Radio (Deputy Web Director and Radio Show Host), DCReads (Tutor), Georgetown Capitol G's A Cappella (Bass singer)

Classes: Introduction to Computer Science I and II, Data Structures, Advanced Programming, Introduction to Databases, Calculus III, Discrete Math, Linear Algebra, Introduction to Statistics, Applied Statistical Methods, Ordinary Differential Equations, Introduction to Computer Systems, Operating Systems, Compiler Construction

Hobbies: Singing, Tutoring, Sudoku, Jigsaw puzzles, Farming, Skateboarding