William C. Gillette

908-300-0673 | wgillette02@gmail.com | Hillsborough, NJ 08844 | linkedin.com/in/williamcgillette | https://www.williamcgillette.com/

Professional Summary

Highly motivated problem solver with excellent communication skills. Eager to apply and grow my statistical/data analysis and technical skills with Python, Java, web development, and software engineering to develop intuitive applications and automated analyses. Proven ability to manage time and multiple priorities as a year-round student athlete. Recognized by leaders as driven and responsible by selection to leadership positions. Described by peers as a mentor and "go-to" resource.

Education

Ursinus College, Collegeville PA I Recipient of Ursinus Gateway Scholarship

BS, triple major: Computer Science | Statistics | Math GPA: 3.99

ANTICIPATED MAY 2025

University of Michigan - Coursera

Dec 2020-Jun 2023

Computer Science and Data Analytics, self-initiated study earning 16 certifications

Skills

Programming Lang/Web Dev: Python, JavaScript, Java, SQLite, SAS, HTML, CSS, React.js, Node.js, Lua, C++, R

System: Data Structures, DB Integration, OOP, Webservices (SOAP, REST), Redux.js, Express.js, PyTorch, Reactstrap, Visual Studio

Analysis: Statistical, Data, Linear and Multiple Regression, Google Data Analytics, Calculus (I-IV), Linear Algebra, Abstract Algebra

System Dev: Requirements, System Analysis, System/Software Design, Testing, Debugging, Documenting (Code, End User)

Project Management: Agile Methodology, Scrum Master, System Development Life Cycle (SDLC)

Other: Leadership, Team Management, Collaboration, Teamwork, Communication (Oral, Written, Presentation), Time Management

Independent Research and Projects

o Degree Builder for Ursinus College Students

Jan 2023-May 2023

- Scrum Master, developed a user-friendly tool to fulfill students' need for an intuitive, comprehensive college career and academic planner
- Planned, built, and executed a JavaScript web application. Employed Agile and SDLC to manage project through all
 phases (requirements gathering, key documentation, user acceptance testing (UAT), debugging and training)
- Skills/Technologies: Reactstrap · Node.js · CSS · SQLite · HTML · React.js · Redux.js · Express.js
- Validity of SAT Score as a Predictor of College Success

Jan 2023-May 2023

- Conducted statistical analyses in 30-page research paper, and provided to professor to support her research
- Skills/Technologies: Data Analytics, Linear and Multiple Regression Analyses, Chi-Squared Analysis, Python, R
- o A Data-Driven Approach to Structure-Based Large Scale Audio Version Identification

Jan 2022-May 2022

- Tackled music information retrieval problem of automatic audio version identification
- Utilized machine learning to transform datasets of songs into "self-similarity matrices"
- Performed supervised & unsupervised experiments to find most accurate, scalable cover song identification strategies
- Skills/Technologies: PyTorch · Machine Learning · Python
- o <u>Convex Hull Visualization</u> (Practical applications: collision avoidance of particles, traffic, etc.)

Apr 2021-May 2021

- Enabled the automated generation of 2D or 3D convex hulls from a set of 2D points
- Developed web-based modeling application to convert points by applying "geometric lift" using a convex function
- Skills/Technologies: JavaScript · Node.js · CSS · HTML · Express.js

Experience

Lead Tutor, Computer Science | Math | Statistics, Ursinus College

Sep 2021-present

- Onboarded and mentored new tutors; Evolved program by providing enhancement insights to manager
- Developed strategies and adapted teaching to meet individual needs/learning style
- Evaluated tutees and provided assessment to professors
- Student Representative, Computer Science Principles Professional Training, Code.org

Aug 2022-May 2023

- Delivered input in workshops for high school computer science teachers
- Partnered to develop and deliver lesson on routers and redundancy

Relevant Coursework

Computer Science (focus of Software Engineering): Database Design, Software Engineering, Object Oriented Programming (OOP), Computer Architecture & Organization, Computer Graphics, Data Structures & Algorithms, Theory of Computation, Python Mathematics (focus of Business & Industry): Linear Algebra, Calculus I-IV, Discrete Math, Abstract Algebra, Real/Numerical Analysis Statistics: Applied Regression Models, Computational Statistics, R Lab, Math Statistics, Statistics I and II

Awards and Honors

o Upsilon Pi Epsilon International Honor Society for Computing (2023) – elected President by Computer Science faculty

- o Kappa Mu Epsilon National Mathematics Honor Society (2023)
- o Mathematics and Computer Science Faculty Prize for Promising Sophomore (2022)
- o Phi Kappa Sigma Hezman Award (2022) Exemplifying 7 Core Values of the Fraternity
- o Centennial Conference Student Athlete Academic Honor Roll / Dean's List (2022)

Community Service, Extracurriculars, and Leadership

- o President, Upsilon Pi Epsilon International Honor Society for Computing (2023-present)
- o Vice President (2022-present) & Treasurer (2020-21), Computer Science & Robotics Club
- o Graduate, Phi Kappa Sigma Men of Honor Leadership Institute (2021-22)
- Academic Chair (2021-present), Historian (2021), & Parliamentarian (2021), Phi Kappa Sigma International Fraternity
- o Leukemia & Lymphoma Society, American Foundation for Suicide Prevention, Special Olympics fundraising, event support
- o Division III Cross Country, Division III Track & Field
- o Hispanic Alliance for Career Enhancement (HACE)