

William C. Gillette

908-300-0673 | wgillette02@gmail.com | github.com/wgillette | [linkedin.com/in/williamcgillette](https://www.linkedin.com/in/williamcgillette) | <https://www.williamcgillette.com/>

Professional Summary

Highly motivated problem solver with excellent communication skills. Eager to apply my data science skills with Python and R for automated analyses and my background in full-stack web and software development to deliver intuitive applications. 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 and described by peers as a mentor and “go-to” resource.

Education

Ursinus College, Collegeville, PA

BS, triple major: Computer Science | Statistics | Mathematics

Recipient of Ursinus Gateway Scholarship

GPA: 3.99/4.0

Dec 2024

Coursera – University of Michigan, Google Data Analytics, University of Hong Kong

Dec 2020-Jun 2023

Self-initiated study in React Web Development and Data Analytics in R and Python, earning 16 certifications

Skills

Data Analysis: Python, SAS, SQL, Excel, RStudio, Jupyter Notebook, Visual Studio, Regression Analysis, Machine Learning

App Dev: Java, HTML, CSS, JavaScript, Node.js, React/Redux, Bootstrap 5, Responsive Design, Debugging, Webservices (REST), OOP

Project Management: Agile Methodology, Scrum, SDLC, Requirements, User Acceptance Testing, Documentation (Code, End User)

Independent Research and Projects

- [Physical Activity During the COVID-19 Pandemic](#) (*RStudio · Data Science · Causal Impact*) Oct 2024-Dec 2024
 - Conducted a causal impact analysis using Institute for Health Metrics and Evaluation data to assess the relationship between age, physical inactivity, and cardiovascular disease prevalence using visualization tools to present findings
 - Analyzed independent samples of elderly and young adult women from California and Florida to evaluate differences in cardiovascular disease prevalence and disability-adjusted life years (DALYs)
 - Discovered a statistically significant increase in cardiovascular disease prevalence in Florida ($p=0.002$) and a downward trend in cardiovascular DALYs in California ($p=0.031$) during the years of the pandemic
- [Evaluating the Sensitivity of the Housing Market](#) (*Regression · RStudio · Macroeconomics*) Feb 2024 -May 2024
 - Identified key macroeconomic variables influencing housing prices and analyzed their stability during economic crises
 - Used Bayesian regression, LOO cross-validation, and residual plots in RStudio to assess model fit and assumptions
 - Refined models by addressing violations in linearity and variance, ultimately determining that inflation, unemployment, and population growth strongly influenced housing prices with inflation having the most profound impact
- [Ursinus College Degree Builder](#) (*React/Redux · SQL · Node.js · Bootstrap*) Jan 2023-May 2023
 - Scrum Master: employed Agile and SDLC to manage project (requirements gathering, key documentation, user acceptance testing, debugging), led weekly standup meetings to evaluate Gantt chart progress
 - Planned, built, and executed a React web application, developing a user-friendly tool to fulfill students' need for an intuitive, comprehensive academic planner
- [Validity of SAT as Predictor of College Success](#) (*Regression · Data Analytics · RStudio*) Mar 2023-May 2023
 - Conducted statistical analysis, wrote 30-page research paper to support professor's doctoral research
 - Cleaned and drew insights from data containing college students' high school GPA, first year GPA, and SAT scores
- [Large Scale Audio Version Identification](#) (*PyTorch · Numpy · Machine Learning*) Jan 2022-May 2022
 - Tackled music information retrieval problem of automatic audio version identification
 - Transformed datasets of songs into “self-similarity matrices” for input into a convolutional neural network
 - Conducted supervised experiments to determine the most accurate, scalable cover song identification strategies

Experience

- Technical Delivery Analyst, Computer Aid Inc. (CAI) Feb 2025-Present
 - Collaborate with cross-functional teams to understand and support the implementation of CWS contracts.
 - Analyze data to generate insights that drive improvement in workforce management efficiencies.
 - Develop business intelligence reports to provide stakeholders with actionable insights, working closely with industry partners to streamline processes.
- Data Analyst Intern, Computer Aid Inc. (CAI) Jun 2024-Aug 2024
 - Collected data, analyzed patterns and trends, and presented data-driven insights and conclusions to team members
 - Helped the organization make more informed decisions and proactively improve the overall customer experience
 - Collaborated with other interns on a community outreach project
- Lead Tutor, Computer Science | Mathematics | Statistics Sep 2021-May 2024
 - 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 40+ tutees and provided assessment to professors

Awards and Honors

- Salutatorian, Ursinus College Class of 2025
- Best Data Visualization, DataFest Philly (2024) – voted upon by three American Statistical Association staff members
- Faculty Prize in Mathematics (2024), Faculty Prize for Promising Sophomore in Computer Science (2022)
- NCAA Division III Metro Region Cross-Country All-Academic Award (2023)
- Upsilon Pi Epsilon International Honor Society for Computing (2023) – elected President by Computer Science faculty
- Kappa Mu Epsilon National Mathematics Honor Society (2023)

Community Service, Extracurriculars, and Leadership

- Inclusive Data Science Initiative for Research and Innovation, Ursinus College
- Vice President (2022-2023) & Treasurer (2020-2021), Computer Science & Robotics Club, Ursinus College
- Two-time Graduate, Phi Kappa Sigma Men of Honor Leadership Institute (2022-2023)
- Academic Chair (2021-2023), Historian (2021), & Parliamentarian (2021), Phi Kappa Sigma International Fraternity
- Leukemia & Lymphoma Society, American Foundation for Suicide Prevention, Special Olympics – fundraising, event support
- Division III Cross Country and Track & Field
- Hispanic Alliance for Career Enhancement (HACE)