Ian Washburn

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EDUCATION

Bridgewater State University, Department of Computer Science   Bridgewater, MA
Bachelor of Science in *Computer Science*, GPA: **3.81**   Graduating May 2022

Bridgewater State University, Department of Mathematics   Bridgewater, MA
Bachelor of Science in *Mathematics*, with a Minor in *Statistics*   Graduating May 2022

TECHNICAL SKILLS

Languages: Python, Java, HTML, CSS, JavaScript, C++, R, SQL, MATLAB
Tools: Git, Slack, Microsoft Teams, Database Managers, etc.

RESEARCH EXPERIENCE

Bridgewater State University   Bridgewater, MA
Undergraduate Researcher with Dr. Thomas P. Kling   May 2021 – Present
- Studying Gravitational Lensing around Rotating Black Holes
- Improved existing software to simulate the trajectories of light rays when travelling near Rotating Black Holes
- Developed new data analysis and visualization software

National Science Foundation (NSF-IRES-1854153)   Tbilisi, Georgia / Bridgewater, MA
SIMuR Research Fellow   May 2019 – December 2019
- Built IoT devices to collect and report data from archaeological sites
- Digitally reconstructed archaeological artifacts using **MetaShape Pro** and **MayaLT** to digitally preserve ancient artifacts

National Science Foundation (NSF-IRES-1854153)   Bridgewater, MA
SIMuR Lead Research Fellow   May 2020 – December 2020
- Planning logistics for international travel and living (Travel cancelled due to COVID-19)
- Continued work with digital reconstruction of archeological artifacts and environments
- Began the development of the Shiraki Virtual Museum using **Unreal Engine**, a museum that is completely accessible via virtual reality

ACCOLADES

- Dean's List, (2018-Present)
- SEISMIC NSF Scholarship (2021-Present)
- Bruce Bartlett '68 Endowed Scholarship (2020)
- Patricia Quinn Bartlett '67 Endowed Scholarship (2021)
- "*How Machine Learning can help us discover ancient civilizations: two projects in support of archaeological work in the Shiraki Plateau*"
  Mid-Year Research Symposium, Bridgewater State University, Bridgewater, MA
  Oral Presenter (2020)

VOLUNTEER EXPERIENCE

Bridgewater State University Accepted Students Day, Guest Speaker   April 2020
After School Program for the Center for the Advancement of STEM Education   December 2019
United Nations Women in Technology Fair in Racha, Georgia   July 2019