**Madeleine Weber**

https://maddiebwebs.github.io/MBW\_personalsite

304-362-2202| madeleine.b.weber@gmail.com

**Education**

**Purdue University** | West Lafayette, Indiana

August 2023

Elmore Family School of Electrical and Computer Engineering

*Master of Science in Electrical and Computer Engineering*

**Major**: Electrical and Computer Engineering

**GPA**: 3.49/4

**West Virginia University** | Morgantown, WV

May 2022

Statler College of Engineering and Mineral Resources | Honors College

*Bachelor of Science in Computer Engineering*

**Major**: Computer Engineering

**GPA**: 3.61/4 Dean’s List: 4 semesters, President’s List: 1 semester

**Project Experience**

**Understanding Democracy: A Government and Politics Guide**

*App Development*

* Objective: to make learning about the U.S. government more accessible.
* Learned how to use XCode to implement app interface and functions.
* Currently on the Apple App Store for download, 100+ downloads to date.

**EcoCAR Mobility Challenge** August 2021 – May 2022

*Propulsion Controls Modeling Team*

* Worked with a Simulink model of HEV propulsion controls.
* Performed research on Equivalent Consumption Minimization Strategies.

**Work Experience**

**Aon,** Remote June 2023 - Present

*Software Engineer IP Litigation Consultant*

* Reviewed Intellectual Property materials for relevant information.
* Performed research on growing technology and its impact on the IP sphere.
* Presented findings and technical concepts to colleagues.

**NASA,** Morgantown, WV August 2020 – May 2023

*Static Code Analysis R&D Fellow*

* Developed a tool to improve the efficiency and accessibility of static code analysis tools.
* Presented Static Code Analysis research to other SCA analysts and IV&V staff.
* Improved tool documentation and Static Code Analysis training resources.

**WVU Upward Bound,** Morgantown, WV May 2020 – August 2020

*Academic Coordinator*

* Mentored underprivileged youths to ensure their success in summer classes.
* TA-ed and tutored students in a variety of classes, with a focus on math and science.

**WVU Statler IT**, Morgantown, WV August 2019-May 2020

*Computer Lab Proctor*

* Supported basic IT services.
* Supervised student use of computer labs and assisted with technical issues.

**WVU Research Apprenticeship Program**, Morgantown, WV August 2018-April 2019

*Research Assistant*

* Assisted in the study of electrical stimulation therapy on stroke patients.
* Presented research at WVU’s annual research symposium.
* Worked with Virtual Reality and 3D printing.

**Involvement**

* Society of Women Engineers August 2018 - May 2022

*Committee member*

* WVU Alpha Omega Epsilon January 2019 - May 2022

*Fundraising Committee Member*

* Food Recovery Network August 2020 - May 2022

**Scholarship**

**Publications:**

* “CST: A Tool for Improving the Efficiency and Effectiveness of Static Code Analysis Tools”, NASA OSTEM Internship Program Abstract Book (internal publication), Summer 2021

**Presentations:**

* Weber, M., Thomas, A., and Gritsenko, V. Implementation of Virtual Reality and Leap Motion Capture in Stroke Patient Therapy. Poster Presented at: WVU Research Symposium; April 2019; Morgantown, WV.
* Weber, Madeleine, and O’Dell, Cecil. CST: A Tool for Improving the Efficiency and Effectiveness of Static Code Analysis Tools. Oral Presentation w/ PowerPoint at: NASA Intern Symposium; July 2021; Remote.
* Weber, Madeleine, and O’Dell, Cecil. Technical Discussion - SCA R&D: The Next Generation of IV&V SCA. Oral Presentation w/ PowerPoint at NASA IV&V; June 2022; Remote.
* Weber, Madeleine. Static Code Analysis Summit - Checker Selection Tool Update. Oral Presentation w/ PowerPoint at NASA IV&V; January 2023; Remote.
* **Maxine and Edward Nichols Fellowship**: August 2022 - May 2023 Purdue University

**Programming Languages**

* Python
* C
* C++
* Java
* Matlab