

## Skills

- Experienced in JavaScript, HTML, CSS, Rust, Python, PHP, and Unix tools
- Able to create fully functioning products independently

## Achievements and highlighted projects

- Present **Open Source**, *GitHub*, jacobmischka.  
Over 200 repositories in a wide variety of languages. Maintain several npm packages, notably react-flatpickr and gatsby-plugin-react-svg with over 50,000 weekly downloads each. Published several additional projects as MCW Anesthesiology (GitHub: mcw-anesthesiology).
- 2020 **Mechanizing WebAssembly Proposals**, *University of Wisconsin-Milwaukee*.  
My Master's thesis. Augmented an existing mechanized Isabelle proof of WebAssembly soundness to include new language features added since the mechanization's publication.
- 2014 **Version-Aware Word Documents**, *University of Wisconsin-Whitewater*.  
Designed modification to Microsoft Word files to track version changes and tool to merge revisions. Presented at ACM DocEng 2014 and paper published in post proceedings.

## Experience

- 2015–Present **Programmer Analyst**, *Medical College of Wisconsin*, Anesthesiology Department.
- Develop tools to process, manipulate, and display data in meaningful ways
    - Rust-powered GraphQL server powering data retrieval and analysis
    - WebAssembly-powered client-side case browser and analysis tool
    - Web interfaces using Svelte and React
    - Offline individualized analysis and plotting using Python and Matplotlib
  - Develop, update, and maintain internal departmental web applications
    - Trainee and faculty evaluation system (PHP, Vue)
    - Trainee day-off management system (Rust, JavaScript, React)
    - Academic calendar merger and frontend (JavaScript/Node, React)
    - Lecture attendance tracking application (PHP, React, GraphQL)
    - Department directory (JavaScript, Svelte, Python, GraphQL)
  - Manage department websites
    - Public website (Sitecore)
    - Custom intranet site (Wordpress)
    - Custom-made promotional sites for subspecialties (Gatsby, Jekyll)
- 2011–2014 **Technical Administrator**, *Prairie Woods Golf Course*, Avalon, WI.
- Installed and maintained computer hardware and software on site

## Education

- 2017–2020 **Master of Science**, *University of Wisconsin-Milwaukee*, Milwaukee, WI.  
Program: Computer Science  
GPA: 4.0
- 2011–2015 **Bachelor of Business Administration**, *University of Wisconsin-Whitewater*, Whitewater, WI.  
Major: Management in Computer Systems  
GPA: 3.821