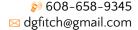
Dan Fitch

Software developer



I am driven to improve systems to make them work better, automate the frustrating parts, and help people get things done.

Experience

2019 - 2023 Research Programmer UW-Madison Center for Healthy Minds, Madison, WI

- · Supported research teams with software, storage, and psychophysiological and other research hardware
- · Built custom software solutions for research, including complex instruments and reporting using REDCap, EMA via SMS, mobile app integrations, payment systems, behavioral tasks, and various in-browser tasks for remote studies
- · Assisted on Python and Matlab pipelines for data QA, analysis, and sharing, including BIDS-formatted EEG, MRI, and various psychophysiological data streams
- · Helped with general IT support and improved documentation and processes; active in grassroots attempts to improve diversity, equity, inclusion, and the wider community culture

1998 - 2018 Senior Software Developer Legislative Technology Services Bureau, Madison, WI

- · Re-engineered custom .NET constituent/contact management system with complex mailing lists, topic and legislation tracking, and extensible ORM-based architecture to allow for later additional web and/or mobile interfaces
- · Created extensible, searchable Solr-backed documents site to replace legacy proprietary systems
 - Faceted metadata search over corpus of 10 million documents
 - Automated cross-reference linking for natural-language references
- · Drove a team push for improved practices, including automated unit and full-stack tests with continuous integration

Education

2014 - 2015 **B.S. Information Science and Technology UW-Milwaukee SOIS**

Skills

- General: Programming alone or with a team, data wrangling, automation, testing, software and hardware troubleshooting, general IT support, systems analysis, process improvement, requirements gathering, project planning, learning on the fly, technical communication and documentation, typography, design.
- · Ecosystems: Windows, Mac, *nixes (Ubuntu, Scientific Linux, etc.), Android, iOS, Arduino, Biopac.
- Languages: Fluent in Python, Matlab, R, F#, C#, Javascript, Ruby, Lisp, YFX, various shell dialects.
- · Web development: Django, Rails, MVC.NET, D3, React, Angular, and various other JS frameworks. Familiar with administering Apache, IIS, nginx, lighttpd. Can also write HTML, CSS, etc.
- · Research: HTCondor, Globus, REDCap, Qualtrics, PsychoPy, E-Prime, Lab.js, Gorilla, AcqKnowledge.
- · Data: SQL maintenance and scripting (familiarity with SQL Server, Oracle, Postgres, MySQL, SQLite, etc.), Solr, S3.

Interests

My hobbies include: writing, music, art, board game design, games of all kinds, electronics, cooking, axiology, and activism.