Mark Cui Pan

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EDUCATION

UW-MADISON

BS IN MOLECULAR BIOLOGY

May 2015 | Madison, WI Cert. in Chinese Professional Comm. Dean's List (four semesters) Cumulative GPA: 3.42 out of 4

WAUSAU WEST

HIGH SCHOOL DIPLOMA May 2011 | Wausau, WI Valedictorian National AP Scholar

LINKS

Github:// factcondenser LinkedIn:// markcuipan

COURSEWORK

SELF-STUDY

HarvardX Intro to Computer Science Michael Hartl's Ruby on Rails Tutorial Udacity's Developing Android Apps

UNDERGRADUATE

Data Structures and Algorithms Computer Engineering Artificial Intelligence

SKILLS

PROGRAMMING

Most comfortable with:
Ruby • Rails • JavaScript
RSpec • Capybara • Scrum
HTML5 • CSS3 • SQL
Working knowledge of:
React • Python • C • Bash
Git • Docker • AWS • Heroku
Have dabbled in:
GraphQL • Swift • Android

LANGUAGES

Node • Julia • ATFX

Fluent
English • Cantonese
Competent:
Mandarin • Spanish

EXPERIENCE

WISCONSIN ENERGY INSTITUTE | FULL-STACK DEVELOPER

Feb 2018 - Present | Madison, WI

- I design custom domain models and user interfaces as part of an **Agile** dev team to assist 500+ researchers and administrators with a wide variety of workflows.
- I wrote rake tasks to import mission-critical Excel data for reporting to the **Department of Energy**, the institute's primary funding source.
- I audited our **Rspec** + **Capybara** test suite, making fixes to align it with industry best practices, which reduced its single-process runtime by over 30%.
- I implemented file upload functionality with the **CarrierWave** gem and **Minio**, an Amazon S3-compatible API.
- I wrote an import script that parses output from analytical instrumentation software into **Ruby** objects; I visualized this data with **D3**.
- I built dynamic nested forms using AJAX and jQuery.
- I wrote shell scripts to assist with database management and config file updates.
- I develop against a **Docker** clone of our production **Oracle** database and participate in code reviews on **GitLab**.

BAOZITUTORS | Co-FOUNDER

Oct 2017 - Present | Hong Kong

- I built this web-based tutor-matching platform with my co-founder using **Ruby** on **Rails** and a test-driven, iterative workflow. I'm currently in the process of making the app **PWA-compliant** to expand our user base.
- During this time, I also migrated a WordPress site I had created to advertise my personal tutoring services to a page on my portfolio site. I built the page from scratch using HTML5, CSS3, and JS. I used Bootstrap and media queries to make it responsive and painstakingly took its PageSpeed Insights score from 43 to 100/100, learning about asset-optimization, design standards, CDNs, and cache-control in the process.

PGOETSCH SERVICES, LLC | CONTRACTOR

Winter 2017 | Wausau, WI

- I wrote code to send **SMS messages** to members of the core **JPW Industries** dev team were parts of their import script to fail.
- I built the website for Vilas & Company using Jekyll and Amazon S3.

OPTIMIZE YOUR GROW | CONTRACTOR

Fall 2017 | Oakland, CA

• I resolved an issue with my client's **Angular** app in which requests were timing out because his server was busy solving an optimization problem.

RESEARCH

UW-MADISON DEPT. OF PSYCH. | UNDERGRADUATE RESEARCHER Jan 2014 - Aug 2014 | Madison, WI

- I assisted **Stacey Kigar** and **Prof. Tony Auger** with data collection and analysis to study epigenetic mechanisms in the central nervous system of rats.
- I wrote a **Python script** to perform calculations and expedite cDNA synthesis.