

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)

WAUSAU WEST

HIGH SCHOOL DIPLOMA

May 2011 | Wausau, WI

Valedictorian

National AP Scholar

LINKS

GitHub:// [factcondenser](#)

LinkedIn:// [markcuipan](#)

Twitter:// [markcuipan](#)

COURSEWORK

SELF-STUDY

Paulo Perrotta's Metaprogramming Ruby

Sandi Metz's Practical OO Design in Ruby

Michael Hartl's Ruby on Rails Tutorial

UNDERGRADUATE

Data Structures and Algorithms

Computer Engineering

Artificial Intelligence

SKILLS

PROGRAMMING

Most comfortable with:

Ruby • Rails • JavaScript

React • RSpec • Capybara

Jest • Cypress • CSS3 • Git

Working knowledge of:

Go • Python • Java • Node

SQL • Docker • AWS • Bash

Have dabbled in:

Elixir • GraphQL • \LaTeX

Android • Flutter • Rust

LANGUAGES

Fluent

English • Cantonese

Competent:

Mandarin • Spanish

EXPERIENCE

DOXIMITY | SOFTWARE ENGINEER

Aug 2019 – Present | Austin, TX

- I work remotely with the social updates team, maintaining and extending applications responsible for sending out 300K+ user notifications per month.
- I used a hashset to improve an algorithm for reaggregating notifications, which decreased that endpoint's memory allocations by over 90%.
- I built a pipeline for disseminating 1K+ peer recommendations per month on top of **Sidekiq**, **Redis**, and **Kafka**.
- I wrote a backfill task to safely and efficiently search and update 180M+ records in our production database.
- I used batching, caching, and indexes to optimize a daily-run archive job, which reduced its execution time by 98%.
- I engage in regular design discussions with my peers, mapping requirements to tools and their tradeoffs.
- I use **Docker** containers for local development, **GitHub** for code reviews, and **Pivotal Tracker** for issue tracking.

WISCONSIN ENERGY INSTITUTE | SOFTWARE ENGINEER

Feb 2018 – Jul 2019 | Madison, WI

- I worked on a **Rails** API/**React** UI microservice for visualizing respirometry data. I used Jest and Cypress for frontend testing.
- I built dynamic nested forms and a file tree navigator using **AJAX** and **jQuery**.
- I audited our **Rspec** + **Capybara** test suite, making fixes to align it with industry best practices, which reduced its single-process runtime by over 20%.
- I wrote shell scripts to assist with database management and config file updates, making context switches faster and less error-prone for our entire team.

PGOETSCH SERVICES, LLC | CONTRACTOR

Dec 2017 - Feb 2018 | Madison, 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

Oct 2017 - Nov 2017 | Madison, WI

- 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.

COMMUNITY INVOLVEMENT

OPEN AUSTIN | CONTRIBUTOR

I contribute to projects that aim to improve the quality of life of Austin's residents.

DEV TOGETHER | MENTOR

I mentored new developers at pair programming events around Madison.

MAD-RAILERS | PRESENTER

I gave a technical talk on **metaprogramming** and a non-technical one on **job-hunting**.