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

CODE2COLLEGE | Co-Instructor
I co-lead a biweekly Python and JavaScript course for high-schoolers in Austin.

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**.