

Patrick Cason

Senior front-end developer

Nashville, TN (remote-only)

me@patrickcason.com

(615) 339-4300

Freelance software developer with 15 years of professional experience building websites, web applications, and open-source libraries. Also a highly capable UI/UX designer and engineering manager.

Experience

Raise Financial

Chief Technology Officer

September 2017 - Present

- Designed and developed multiple iterations of the web application, written in NextJS, and using the Stripe, Plaid, and Twilio API's
- Designed all brand, identity, and corporate materials. Also managed a small engineering team and product lifecycle

OpenMined

Engineering Team Lead

October 2020 - July 2021

- Led over 100 remote software engineers, cryptographers, and data scientists subdivided into 30 individual teams
- Created technical briefs and documentation related to various privacy-enhancing technologies such as Secure MPC, Homomorphic Encryption, Differential Privacy, Federated Learning, Self-sovereign Identity, and Remote Computation
- Created detailed financial figures, projections, and grant proposals for the purposes of funding and staffing the Engineering department

Federated Learning Team Lead

August 2019 - October 2020

- Created the world's first open-source libraries for federated learning on web (browser and server), mobile (native Andriod and iOS), and IoT (Python)
- Developed a bridge library to convert PyTorch operations into TensorFlow and TensorFlow.js operations for trusted execution on remote environments
- Authored the entire technical architecture and project roadmap, as well as led a team of over 20 software engineers and researchers
- Worked with Google, UCSF, and other partners to secure over \$500k in funding

Founding Team Member/OSS Contributor

September 2017 - October 2021

- Was part of the founding team of OpenMined, helped to grow the community to over 12,000 members from over 60 countries
- Awarded a 3-month funded research grant (out of 6,000 applicants) to develop the world's first open-source library for federated learning in the browser (syft.js)

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Experience (cont.)

Satchel Health

Director of Engagement

April 2016 - January 2017

- Worked on-site with clinicians, nurses, administrators, and patients to troubleshoot deployment issues of our proprietary telemedicine software
- Created a user experience workflow to pipeline field data back to sales, marketing, management, design, and engineering teams
- Responsible for the on-site deployment and education rollout of hundreds of nursing staff members in dozens of long-term health facilities across the US

Lead Front-end Engineer and Designer

May 2014 - April 2016

- Designed and developed the web and Android applications of our proprietary telemedicine suite, worked heavily with WebRTC and socket servers to deliver live patient vital signs and live audio/video streaming
- Integrated a variety of third-party hardware devices such as Google Glass, bluetooth stethoscopes, and pulse oximeters to stream live patient vitals to a remote clinician in a secure HIPAA-compliant environment

Poliana

Co-founder, Head of Product

June 2013 - December 2014

- Aggregated multiple public datasets on the American political system amassing over 110 million rows of unstructured data on lobbying and campaign finance
- Designed and developed the entire web application, utilizing D3.js and other advanced data visualization techniques and libraries

Golden Spiral Creative

Lead Developer

June 2011 - August 2012

- Developed over 40 Wordpress websites and various custom utility libraries for various clients in the music and entertainment industries
- Worked with a designer using the Adobe software suite to translate design mockups into fully-functional websites

Self-employed

Full-stack engineer and UI designer

May 2009 - Present

- Regularly employed as a full-stack engineer and designer since high school
- Worked with startups to enterprises in the fintech, artificial intelligence, events and ticketing, entertainment, intelligence, and healthcare industries

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Skills and Technologies

HTML & CSS	20 years	AWS	9 years	Adobe Suite	16 years
JS / TS	17 / 6 years	Firebase	8 years	Sketch	6 years
Node.js	11 years	Google Cloud	6 years	Figma	4 years
React.js	7 years	Docker	5 years		
D3.js	6 years	Azure	3 years		

- Able to code in Python, Ruby, Java, PHP, and SQL - familiar with C/C++ and .NET
- Competent in Git, as well as command prompts for Linux, MacOS, and Windows
- Competent in a variety of SQL, graph, and serverless databases and ORM's
- Competent with TDD and BDD, as well as most JS testing and automation libraries
- 6 years experience in engineering team management (from 2 to 100 people)

Education

Belmont University

B.S. Web Programming & Design	August 2010 - May 2014
Minor in Entrepreneurship	
3.4 GPA Honor Roll & Dean's List	

About Me

- Built my first website when I was 10, my first computer at 12, my first video game at 14, and my first full-stack web application at 18
- Lived and worked remotely in over 25 countries on 5 continents for over 3 years
- Top 8% overall on Stack Overflow
- Technical editor on "D3.js by Example" by Michael Heydt
- Startup Bus top-6 finalist
- Started an Airbnb business with my father, growing it to over \$800k YRR
- Spent teenage years learning about computers as a hobbyist 3D animator and video game designer
- Conversational in Portuguese
- Passionate about sustainable living, gardening, and restoring vintage keyboards