

# Patrick Grenning

SENIOR SOFTWARE ENGINEER

Chicago, IL

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## Summary

Senior Software Engineer with over eight years of experience in the FinTech and payments industry. Strong contributor to both small and large teams in the development of scalable and high-performing web applications. Proficient as a Full Stack Engineer, well-versed in both front-end and back-end technologies.

## Work Experience

### Fiserv

Chicago, IL

SENIOR SOFTWARE DEVELOPMENT ENGINEER

Mar. 2021 - Present

- Implemented payment methods and features for CommerceHub, Fiserv's global omnichannel payments platform, utilizing the Java/Spring stack.
- Developed a settlement service for CommerceHub, enabling merchants to settle funds from their customers' payments, capable of processing millions of transactions per day.

SOFTWARE DEVELOPMENT ENGINEER

Jul. 2019 - Mar. 2021

- Designed and developed Apple Pay on the Web as a payment method for IPG Connect, Fiserv's hosted payment page, utilizing JavaScript/HTML for the front-end and Java/Spring for the back-end.
- Developed software to integrate TeleCheck (a check acceptance service) as a payment method into Fiserv's payment gateway.

### First Data (acquired by Fiserv)

Chicago, IL

SOFTWARE DEVELOPMENT ENGINEER

Mar. 2018 - Jul. 2019

- Developed features and capabilities for digital wallet payment transactions made with Apple Pay, Google Pay, and Samsung Pay through First Data's payment gateway, utilizing both REST API and SOAP API.
- Developed software responsible for transmitting payment data from the payment gateway to front-end processors, card networks, and banks. This involved adhering to the ISO8583 protocol to appropriately prepare and package data elements for processor transmission.

### Bluepay (merged with Clover)

Chicago, IL

SOFTWARE ENGINEER

Apr. 2015 - Mar. 2018

- Developed and maintained software for Bluepay's KPI and reporting system, which produced data analytics for over 140,000 merchants monthly and delivered 2,000+ reports each month, using SQL and Ruby.
- Built Ruby-based ETL solutions for KPIs extracting data from 30+ data sources.
- Converted the legacy KPI Reporting database from MS SQL Server to PostgreSQL, refactoring over 20,500 lines of SQL code.
- Created a Ruby on Rails application from scratch, providing report generation and configuration support for partners and sales teams. This application was utilized by operations and finance teams to manage payments of residuals and commissions.

### Hydro Flow Products, Inc

Lake Zurich, IL

PRODUCT MANAGER

Apr. 2010 - Jul. 2014

- Led the product development of Fire Pump Tester Software, a SaaS solution designed for collecting, storing, and analyzing flow test data.
- Managed the redesign of the company's e-commerce website, resulting in a 25% increase in the average number of unique visitors per month and a 9% revenue growth over the following year.

## Skills

<b>Programming</b>	Ruby, Java, Python, JavaScript
<b>Back-end</b>	Redis, PostgreSQL, Oracle, Spring Boot
<b>Front-end</b>	Ruby on Rails, Bootstrap, HTML5, CSS, JQuery
<b>DevOps</b>	Docker, Amazon Web Services, Cloud Foundry

## Education

### Dev Bootcamp

Chicago, IL

SOFTWARE ENGINEERING PROGRAM

Aug. 2014 - Dec. 2014

- Completed 19-week, onsite program focused on algorithm design, web development, source control, database design, test-driven development, and maintaining a production environment.

### Purdue University

West Lafayette, IN

B.S. IN ECONOMICS

2005 - 2009

- Extracurricular: Phi Kappa Sigma Fraternity, Alpha Phi Omega Service Fraternity, Study Abroad Program in Dublin, Ireland.

# Projects

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## OptionCharts.io

CREATOR

*Dec. 2021 - Present*

- Created OptionCharts.io, a web application for visualizing options data. Developed using Ruby on Rails, a Python backend service, Redis, and a PostgreSQL database.
- OptionCharts.io has 9,100+ Monthly Active Users (MAU) users and has been featured on ProductHunt.
- Website: <https://optioncharts.io>

## AI Question & Answer Web Template

CREATOR

*Jan. 2023 - Feb. 2023*

- Built an open-source Python Flask web app template for AI Question and Answering on source documents, utilizing LangChain and the OpenAI API.
- Website: [https://github.com/pgrennin/ai\\_question\\_answer\\_web\\_template](https://github.com/pgrennin/ai_question_answer_web_template)