# **Derek Bruinooge**

# Software Engineer

#### **Professional Experience**

2023 – present
Remote, US

# **Creator, Software Engineer,** *Symphony*

- Created Symphony, a cloud-native, open-source framework for adding real-time collaboration functionality to web applications
- Prototyped and deployed backend infrastructure to AWS services including ECS, S3, RDS for PostgreSQL, ElastiCache for Redis, and DynamoDB
- Developed a custom load-testing solution to identify limits of prototyped version
- Engineered a Redis pub/sub solution to horizontally scale WebSocket servers and increase system capacity by more than 40x
- Abstracted away complexities of deployment using AWS CDK and custom CLI tool
- Built a client library connecting web applications to the Symphony backend, and published it as an NPM package
- Authored Symphony's case study: https://symphony-framework.github.io ☑
- Prioritized scalability, fault tolerance, and separation of concerns when engineering solutions
- Collaborated with a remote team of 4 engineers using agile workflow

## 2021 – 2023 Remote, US

#### **Software Engineer,** Self-employed

A few of the projects & technologies used during this time:

- Terminal Real-time application for receiving & debugging webhooks (Express, Node, React, Redux)
- Contact Manager App for storing contact information (Express, Node, Handlebars)

#### Other Experience

2015 – 2022

**Editor,** Bank of Korea

Seoul, South Korea

• Refined language, improved clarity, and ensured consistency across Englishlanguage materials, including published reports and press releases

2013 – 2015

**Content Developer,** Hackers Education Group

Seoul, South Korea

• Wrote and edited TOEFL reading passages, lectures and questions

#### **Technical Skills**

#### **Back-end**

Node.js, Express, Ruby, Go, PostgreSQL, MongoDB, RESTful APIs

#### Front-end

JavaScript, React/Redux, HTML/CSS

# Tooling

Git/GitHub, Docker, Linux, Bash, DigitalOcean, Heroku, AWS (SAA-C03 certification)

#### **Education**

#### J.D., University of Chicago Law School

**B.A., Philosophy,** Western Michigan University