

# Charlotte Brandhorst-Satzkorn

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## Personal Profile

I am a passionate and driven backend developer with an interest in dev-ops and security. In the past four years, I have survived a life threatening illness, left a PhD, gone on a journey of self discovery, and found the thing that drives me: software engineering. Learning to code has reawakened a lifelong passion for technology, learning and innovation I thought I had lost. My bootcamp experience has provided me with a foundation, and now I am searching for a role to grow as a developer. Leaning on the skills I acquired during my research, such as project and time management, allows me to be a valuable contributor to my team. I know what I want in the next four years, and I want to become a *damn good* software engineer.

## Experience

### [pkg.go.dev](https://pkg.go.dev)

#### **Open Source Contribution**

- Enhanced user experience by contributing changes which allows navigation to the latest version of the current package
- Updated outdated documentation to reflect the current repository state
- Added comprehensive tests to ensure quality of contribution and prevent regressions
- Gained experience working with a large unfamiliar codebase
- Upheld stringent contribution standards

### [github.com/gopheracademy/showrunner](https://github.com/gopheracademy/showrunner)

#### **Open Source Management System for GopherCon**

- Written in [Go](#) and [PostgreSQL](#)
- Contributed initial schemas and backend API designs for different areas of application
- Deployed on [Encore](#)
- Taking a central role in code reviews
- Project is ongoing

### [github.com/catzkorn/subscript](https://github.com/catzkorn/subscript)

#### **Subscription Management Platform**

- Subscript allows users to keep track of their subscriptions and be notified when renewal is due
- Backend written in [Go](#) with [PostgreSQL](#) for data persistence
- Frontend written in [JavaScript](#) with [Bootstrap](#) for styling
- Integrated the [Open Banking API](#) via [Plaid](#) and sent .ics reminders via the [SendGrid](#) email API
- Deployed on [Heroku](#), with continuous integration via [Github Actions](#)
- Responsible for data persistence, email reminders, testing, deployment and documentation
- Subscript was built as a final engineering project at Makers Academy, and a short presentation of the project is available [on YouTube](#).

## Education

### Makers Academy Bootcamp (August 2020 - November 2020)

#### Software Development Student

- Built applications in variety of languages, including Ruby, Rails, JavaScript, SQL (PostgreSQL, ActiveRecord) and Go
- Extensively practiced TDD principles using RSpec, Jasmine and Capybara
- Learnt and applied architectural patterns including MVC and DDD
- Pair programmed extensively during design and development of applications
- Provided code reviews focusing on OOP, DRY, SRP and RESTful API design
- Deployed to, and interacted with, cloud platforms including AWS, GCP and Heroku
- Integrated CI/CD workflows using Github Actions and Travis-CI on Github
- Development driven by Agile project management principles using Github Projects and Miro

### University of Southampton (2014 - 2019)

#### PhD Candidate, NERC CDT in Oil and Gas

##### *Base and Heavy Metal Mobilisation during Hydraulic Fracturing of Black Shales*

- Exploring fluid-rock interactions and metal mobilisation to inform regulation and best practices for shale exploration onshore in the United Kingdom
- Solely responsible for project management and direction
- Designed and executed experimental procedures simulating hydraulic fracturing conditions in a laboratory setting
- Presented research at internal and international conferences
- Withdrew from the program prematurely in 2019 due to illness

### University of Portsmouth (2011-2014)

#### Bachelor of Science (Hons) in Environmental Science (2:1)

##### *Acid Mine Drainage and Toxic Metal Contamination from Abandoned Mine Tailings in Adak, Northern Sweden*

- Researched scientific literature to find follow-up research opportunities
- Evolved prior research methodologies to account for improvements in analytical technologies
- Provided detailed written recommendations for site remediation strategies
- Awarded *Best Presentation 2014* for research findings and presentation

## Interests

My personal interests include outdoor sports such as trail running, mountaineering, skiing and climbing. I enjoy reading fiction and non-fiction books, watching movies, playing computer games, listening to music of all genres, and I have been a lifelong fan of motorsport. I continue to have a personal interest in global environmental issues and actively keep up-to-date on the latest science. I run a blog about my journey as a new developer.