

Contact

www.linkedin.com/in/wolfgangcstrack (LinkedIn)
github.com/wolfgangcstrack (Other)
wolfgangcstrack.github.io/ (Personal)

Top Skills

Software Architectural Design
Data Engineering
Software Engineering

Languages

Tagalog (Professional Working)
Japanese (Professional Working)
English (Native or Bilingual)

Wolfgang C. Strack

Software Engineer at Resilience
San Francisco Bay Area

Summary

Hello.

I'm a software engineer. LinkedIn is not really my thing but I respect the grind.

Have a wonderful day.

Experience

Resilience

Software Engineer

October 2021 - Present (2 years 2 months)

San Francisco Bay Area

Riffyn

4 years 4 months

Software Engineer

March 2018 - October 2021 (3 years 8 months)

I grew rapidly in this role after taking charge of a long-term project to re-architect large parts of the back-end code across the organization. In essence, the project involves facilitating and implementing a distributed, event-driven, stream-processing architecture that is highly concurrent and horizontally scalable.

This architecture is driven by Apache Kafka and Kafka Streams and I've led efforts in implementing everything related to these technologies. These efforts include but are not limited to:

- Expressing our data changes in the concise, intuitive language of "events", both figuratively and in code.
- Converting parts of our app monoliths (Meteor.js web app, Python/Celery data-processing app) to micro-services in various languages (Python 3, Java 8+, Scala), improving speed, state consistency, data integrity, and horizontal scalability.

- Building out Kubernetes infrastructure for running Apache Kafka, Apache Zookeeper, and our in-house micro-services—helping lay the foundation our Helm charts in general.
- Teaching and assisting other developers in creating new features as part of this architecture, and allowing them to reap all aforementioned benefits (Python 3, Java 8+, Golang).

Aside from these responsibilities, I wear many other hats. These include but are not limited to:

- DevOps engineer; helped all other developers run our architecture locally via minikube, a python CLI, and parameterized helm charts. And also, again, build out anything related to Kafka :)
- Engineering Standards pioneer; help improve coding practices and engineering culture by writing/improving documentation, solving workflow issues, and implementing automation in local/CI environments (e.g. testing, style linting, auto-formatting, etc.)
- Culture and Leadership Team member; help to identify and keep or improve general culture of the company by conducting 1:1 interviews and gathering information on observed themes, individual relationships, and team dynamics.

Junior Software Engineer

September 2017 - March 2018 (7 months)

This role consisted mainly of data engineering and full-stack engineering using Python 2/3 and Meteor.js (full-stack NodeJS framework) respectively.

On the data engineering side of things, I worked on improving the performance of our data engineering processes (e.g. export and/or cleaning of experiment data), working heavily in Python 2 and 3. During this time, I identified serious issues with the existing architecture—particularly race conditions, non-performant code that could (should) be parallelized, poor data integrity, and poor state handling. After writing detailed, formal improvement proposals, I implemented these proposals myself as solutions to the serious issues I found, improving overall performance and consistency.

On the full-stack engineering side of things, I helped build and improve both front-end and back-end components that would act as interfaces to the aforementioned data engineering processes, facilitating things like user export and/or cleaning of experiment data. I consistently contributed to almost all parts of these interfaces, becoming fluent in NodeJS back-end code and Blaze/React front-end code.

Software Engineering Intern

July 2017 - September 2017 (3 months)

This internship involved developing a full-stack progress-tracking feature of Riffyn's experiment-data-export mechanism, to provide users feedback on long-running processes. The project required a thorough survey of the existing back-end codebase, which was written in Python, in order to predict the amount of work needed to be done as well as ensuring that progress was actually being tracked—this was achieved by updating an entity in MongoDB that could be returned to the user client.

While the main part of the back-end was written in Python, this project also involved developing a front-end circular progress bar that reflects the progress being tracked. This circular progress bar was implemented through the Meteor framework, with use of Blaze templates, Less, and JavaScript.

The length of the internship as well as the time to completion of a working product for the project was actually about 1.5 months (end of July to beginning of September). Upon finishing, I was promoted to a full-time software engineer without needing to finish the full length of the internship (3 months).

UC Berkeley, Haas School of Business

Web Programmer, Office Assistant

August 2016 - May 2017 (10 months)

Under the CFRM department of UC Berkeley's Haas School of Business, this position involved management of front-end updates to the website <http://accounting.haas.berkeley.edu/> with HTML/CSS and JavaScript. I also set up a lightweight promotional website for Accounting at Berkeley and regularly gave consultation on which web technologies would best serve the department and these websites' purposes.

In order to keep my work correct, elegant, and efficient, I introduced a number of arbitrary technologies to my workspace that were not previously there. This includes version control with Git, private online git repositories, and a Unix CLI. I also made use of Node.js and Python to develop my own automated scripts for web scraping, code generation, and other repetitive tasks.

Amazon

Fulfillment Associate

June 2016 - August 2016 (3 months)

This position put heavy emphasis on customer-centricity, teamwork, and leadership with responsibilities we needed to fulfill as the last connecting line before a customer receives their Amazon purchase(s). With all of the aspects of working in a sort center, we, as Amazon's fulfillment associates, distinguished ourselves from other fulfillment centers by ensuring greater quality of work and care when handling customer purchases.

On a less serious note, it was a pleasant side-job where you could say I basically got paid to exercise :)

Advanced Studies Laboratory at NASA Ames Research Center
Web Development Intern and IT Team Co-Leader
July 2015 - June 2016 (1 year)

Under the NuLEAF Technologies Project at ASL at NASA Ames, this position involved full stack web development while working with technologies such as PHP, Symfony and Laravel (which are two different types of PHP frameworks), MySQL databases, HTML/CSS, Javascript, and remote server shell. Responsibilities included programming implementation and, later, making higher-level decisions on implementation design for NuLEAF's websites.

Foothill-De Anza Community College District
1 year

Computer Science Tutor
January 2015 - December 2015 (1 year)
Cupertino, California

Under the De Anza College CIS Department, this position involved working with students in person in the computer lab on a walk-in/signup basis. The courses I tutored for at De Anza College are:

- CIS18 Course Series: Unix/Linux and Shell Programming
- CIS22 Course Series: C++ Programming, Data Abstractions and Structures
- CIS29: Advanced C++ Programming
- CIS35 Course Series: Java Programming
- CIS64B: Introduction to SQL

In order to ensure that students were indeed learning, I took it upon myself to place greater emphasis on having the student ultimately reach solutions on their own. Doing this meant giving useful hints without revealing any answers, showing where students typically make errors and how to fix those errors, as

well as sharing my own methods of learning along with extra references for further reading.

Computer Science Teaching Assistant

January 2015 - June 2015 (6 months)

Cupertino, California

I TA'd for everything a CS transfer student would need, but primarily:

- C++
- Java
- Data Structures and Algorithms

Responsibilities included:

- Holding in-person "office hours" for tutoring
- Answering students' questions via online forum
- Assist the professors in their respective courses with tutoring material

Education

University of California, Berkeley

Bachelor's Degree, Electrical Engineering and Computer Science · (2016 - 2017)

Ohlone College

Transfer, Computer Science · (2014 - 2016)

De Anza College

Transfer, Computer Science · (2014 - 2015)

American High School

High School, General Edumacation · (2010 - 2014)