

Work Experience

Senior Backend Engineer

Shippo

August 2023–Present

Billing, Fraud and Auth Team

San Francisco, US (Remote)

- Built a new metered billing platform capable of handling millions of daily API usage events.
- Optimized the performance of a webhook handler making it 20x faster. [Related blog post](#).
- Built an invoicing fee framework, based on payment methods, to reduce our network payment processing fees.
- Improved engineering productivity with internal libraries and tools for Apache Kafka, AWS SQS and AWS DynamoDB.
- Organized and migrated millions of users to new plan tiers increasing annual SaaS revenue.
- Guided the development of a library to run long SQL queries on Databricks instead of AWS Aurora Postgres.
- Tech stack: Python, Django, Django Rest Framework, Celery, FastAPI, PostgreSQL (AWS Aurora), Apache Kafka, Go, AWS SQS, AWS DynamoDB, gRPC, Databricks, Kubernetes, Terraform.

Senior Software Engineer

Terrastruct

2022–2023

San Francisco, US (Remote)

- Optimized the graph layout engine memory usage and speed by 4x using algorithms and data structures.
- Led the development of a two-way (commit, push, pull) integration between D2 Studio and GitHub.
- Fixed an issue with concurrent updates when multiple users were working on the same diagram.
- Researched and implemented the [engine for hierarchical](#) and [sequence diagrams](#).
- Contributed to [Terrastruct's D2](#) (13k+ stars on GitHub) open source project, notably [PowerPoint](#) and [GIF](#) exports.
- Built an OAuth2 and OpenID Connect (OIDC) compliant Single Sign-On (SSO) flow for self-hosted customers.
- Improved the team productivity with tools to simplify debugging and profiling the layout engine.
- Implemented a suite of end-to-end (e2e) and performance tests using k6js.
- Employee #6.
- Tech stack: Go, Typescript, React.js, PostgreSQL, Redis, AWS, k6js.

Senior Backend Engineer

Zyte (formerly Scrapinghub)

2021–2022

Platform (Scrapy Cloud) team

Cork, Ireland (Remote)

- Built a scalable job scheduler to improve resources usage and job scheduling throughput for a big customer.
- Organized processes and "on call" rotation to reduce interruptions, allowing the team to focus on sprint tasks.
- Operated highly available, distributed services and web APIs on top of a cloud cluster with 30+ servers handling 200k+ requests per day, thousands of web crawling jobs scheduled per hour and millions of records scraped per day.
- Tech stack: Python, Django, Django Rest Framework, Flask, MySQL, Apache Mesos, Celery, RabbitMQ, Apache Kafka, Faust, Grafana, Prometheus, Docker.

Software Engineer

Zyte (formerly Scrapinghub)

2018–2021

Cork, Ireland (Remote)

- Designed and built a generic crawler to download files and articles from thousands of sources. [Related blog post](#).
- Operated a pipeline (ETL) with 50+ crawlers delivering high quality datasets/week for a FAANG.
- Operated a large scale, distributed pipeline with 10+ crawlers delivering TBs/month of product and reviews data.
- Built a crawler to monitor the web for business-to-business (B2B) products being sold in consumer (B2C) platforms.
- Built a "search engine" pipeline to monitor pages for a given set of keywords and its variations on a daily basis.
- Mentored 3 students during Google Summer of Code (GSoC) in 2019 and 2020.
- [Contributed to scrapy](#) (47k+ stars on GitHub) and other open source tools from Zyte.
- Tech stack: Python, Scrapy, AWS, ETL, Docker, Hadoop.

Software Engineer	Inventti	2015–2016 / 2017–2018
Myrp - Cloud ERP and Point of Sale (POS)	Blumenau, Brazil	
<ul style="list-style-type: none">• Built a standalone POS (Point of Sale) software bringing in thousands of new customers.• Built a web API and integration SDK for Myrp to synchronize data with any POS software.• Built a reliable state machine to ensure invoices were properly integrated with a third-party service.• Tech stack: C# .NET, ASP.NET, SQL Server, RabbitMQ, PostgreSQL.		

Software Engineer	Ellevo	2012–2015
	Blumenau, Brazil	
<ul style="list-style-type: none">• Tech stack: Javascript, jQuery, SQL Server.		

Education and Certifications

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| • M.Sc. Computer Science , Universidade Federal do Paraná (UFPR), Brazil. | 2016–2018 |
| • B.Sc. Computer Science , Universidade Regional de Blumenau (FURB), Brazil. | 2011–2015 |

Other Skills

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- Technologies: Git, Event Streaming, Batch Processing, FastAPI, OpenCV, Tensorflow, PyTorch.
 - Other: Agile, Continuous Integration (CI), Continuous Deployment (CD), Unit test, Integration tests, Performance tests (k6), test driven development (TDD), SOLID, Design Patterns.

Extracurricular

Meetup Host	Hackerspace/GruPy Blumenau	2018–Present
	Blumenau, Brazil	
<ul style="list-style-type: none">• Hosted 50+ tech meetups in Blumenau and on YouTube.• Organized FLISoL 2023/2024 with 9 talks, 2 workshops and 50+ attendees.• Organized Blumenau Dev Day 2019/2023 with talks from 10 local tech communities and 100+ attendees.		

Adjunct Professor	Universidade de Blumenau (FURB)	2019–2021
	Blumenau, Brazil	
<ul style="list-style-type: none">• Python and R for data science: taught the basics of Python and R for data science, including core packages such as pandas, matplotlib, scikit-learn, scikit-image, and numpy.• Information Retrieval: taught an introduction to information retrieval, including web crawlers, reversed indices, boolean queries and spell checking.• Data visualization: taught the core concepts about data visualization and types of plots using matplotlib.		