Contact

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www.linkedin.com/in/hensg
(LinkedIn)

Top Skills

Rust (Programming Language)

Nix

Bitcoin

Languages

English (Full Professional)

Portuguese (Native or Bilingual)

Certifications

Machine Learning | Stanford Online

Functional Programming Principles
in Scala | EPFL

Parallel programming in Scala |
EPFL

Divide and Conquer, Sorting and
Searching, and Randomized
Algorithms | Stanford Online

Graph Search, Shortest Paths, and
Data Structures | Stanford Online

Publications

Checkpointing Techniques in
Distributed Systems: A Synopsis of
Diverse Strategies Over the Last
Decades

Achieving Enhanced Performance
Combining Checkpointing and
Dynamic State Partitioning

Henrique Goulart

Sr Software Engineer

Florianópolis, Santa Catarina, Brazil

Summary

I'm a software engineer with over ten years of experience, having
worked across various industries and company sizes. I've tackled
challenging problems ranging from low-latency e-commerce services
to high-throughput distributed parallel jobs.

I enjoy discussing tech architecture, source code intricacies, and
framework internals with my peers to deepen my understanding
of how things work beneath the surface and how we can leverage
that knowledge. I value productive discussions without taking things
personally.

I'm grateful for the experiences I've had, the colleagues who shared
their knowledge, and the managers who guided me along the way—
especially during my time at Chaordic and Trivago.

Experience

Fedi
Software Engineering (Infra team)
February 2024 - Present (8 months)
Austin, Texas, United States

Working with Nix and Kubernetes to manage and deploy services related to
Bitcoin, Lightning, Fedimint, and Matrix Synapse.

Writing backend services for mobile app and tools to enhance monitoring
related to Lightning and other services.

LogRock Inc.
Senior Software Engineer (Backend)
February 2022 - January 2024 (2 years)
Chicago, Illinois, United States

API development with Python/Django/PostgreSQL, I have designed and
implemented a comprehensive document management and fleet operation

system for trucking companies. My role emphasized creating backend processes to ensure seamless operation and data integrity.

In another aspect of my work, I have focused on developing distributed jobs using Python and Celery, with PostgreSQL and Redis as the supporting databases. These jobs import fleet data from third-party APIs during user onboarding. Additionally, I developed a web crawler to aid customers in obtaining competitive quote prices based on their fleet data.

Cloud management: ECS, AWS, Terraform.

Universidade Federal de Santa Catarina
2 years 10 months

MSc Researcher
March 2021 - December 2023 (2 years 10 months)
Florianópolis, Santa Catarina, Brazil

Teaching Assistant
June 2021 - November 2021 (6 months)
Florianópolis, Santa Catarina, Brazil

Created and evaluated a homework for students where they had to build a P2P tic-tac-toe in C.
Recorded presentations:
Socket states, Socket "poll" syscall in C, debugging network, Intro to Protobuf, Intro to gRPC, Intro to Kafka

trivago
Senior Software Engineer (Big Data)
November 2019 - February 2021 (1 year 4 months)
Düsseldorf, North Rhine-Westphalia, Germany

I've been working as a member of the core data team.

Some of my daily activities:
- Implementation of streaming jobs using Dataflow/Apache Beam to process Kafka messages (+25k/s)
- Implementation of Hadoop tools and Hive UDFs to improve job performance and to allow users to better manipulate data
- Implementation of micro service to validate and audit data
- Support other teams reviewing/suggesting optimizations for Spark jobs and Hive

Open source contributions:
- [SPARK-30246][CORE] OneForOneStreamManager might leak memory in connectionTerminated #27064 https://github.com/apache/spark/pull/27064

Tech stack: Hadoop, Hive, Spark, Kafka, Protobuf, GCP, Dataflow

Chaordic
Senior Software Engineer (Backend)
December 2014 - October 2019 (4 years 11 months)
Florianópolis Area, Brazil

Chaordic is a technology company that transforms artificial intelligence, data mining, and machine learning into personalized recommendations for e-commerce.

I worked as a Software Engineer in different teams designing and implementing backend APIs and distributed systems.

As a Data Collection member, I designed and implemented backend APIs to perform validation rules of data sent by partner e-commerce webpages (+2k/s requests)
I also built a reactive distributed crawler using Akka Actors to craw data from partners/external APIs and e-commerce pages, to get up-to-dated product prices and infos.

Tech stack: Scala, Akka, NodeJS, Java, Ansible

As a Platform member, I've maintained the core backend APIs responsible for storing e-commerce data into Kafka, Redis, and Cassandra. Furthermore, I've created an API to be used by other teams as a central configuration server.

Tech stack: Java, Spring, Redis, Kafka, Cassandra, Chef

As a DataLake team member, I've helped the company to build a data lake to receive and organize data sent from point-of-sale systems. I've implemented an API to ingest data, defined the data models, and implemented Spark jobs to organize it into the Hadoop cluster to be used by other co-workers.

Tech stack: Scala, Akka Http, Spark RDD, Hadoop, Ansible, AWS.

Substractum Tecnologia
Full Stack Engineer
August 2013 - November 2014 (1 year 4 months)
Florianópolis Area, Brazil

Responsible for planing and development of web applications.
I developed an auction web application, implemented back-end/front-end, and designed the database entity and relationships.

Tech stack: Java, Hibernate, EJB3, JSF, MySQL

Nec Plus Ultra - NPU
Full Stack Engineer
September 2011 - August 2013 (2 years)
Florianópolis Area, Brazil

Development of a Web task management system like Asana/Trello.

Tech stack: Java, Smart GWT, PostgreSQL, Hibernate

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Education

Universidade Federal de Santa Catarina
Master of Science - MS, Computer Science · (July 2021 - December 2023)

Universidade Federal de Santa Catarina
Bachelor's Degree, Information Systems / Computer Science · (2011 - 2015)

SATC - Associação Beneficente da Indústria Carbonífera de Santa Catarina
High School Diploma, Informatics · (January 2008 - December 2009)