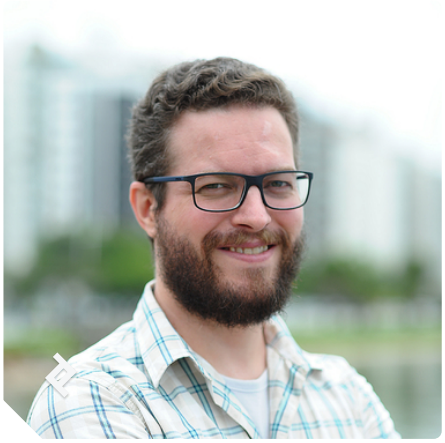


Daniel Presser

Full Stack Web Developer in Florianópolis - State of Santa Catarina, Brazil • Member since January 5, 2021

Daniel has over 20 years of software development experience, with a strong background in distributed systems, cloud computing, and software architecture. He has a background in full-stack development in systems ranging from line-of-business applications to applied research projects. He has a master's degree and is currently pursuing a Ph.D. in computer science.

Java | Python | JavaScript | React | Docker | SQL | Test-driven Development (TDD) | Amazon Web Services (AWS) | AWS | MongoDB | AngularJS | Hadoop | Security | Node.js | Spark

Portfolio

SENAI Innovation Institutes
Java, Python, Apache Kafka, MongoDB, SQL, Linux, Docker, Apache Camel, Pandas...

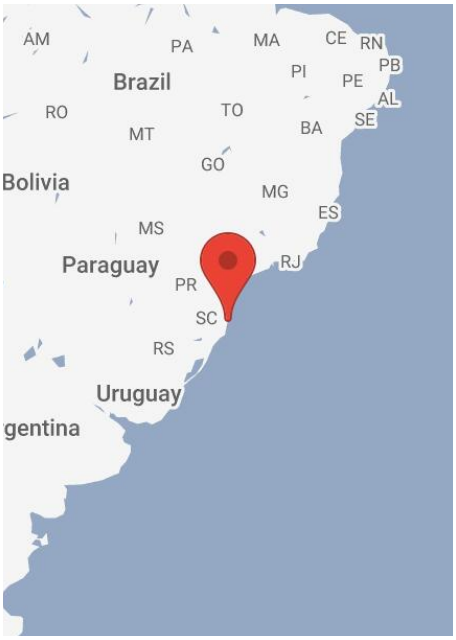
Federal University of Santa Catarina
Hadoop, Spark, Java, Python, HDFS, MongoDB, Node.js, Express.js, React...

Megasul Sistemas
C#, IIS SQL Server, IIS 8, AngularJS, XML Web Services, Apache Solr...

Experience

Java	10 years
SQL	10 years
JavaScript	10 years
Python	8 years
Parallel Programming	6 years
Distributed Computing	6 years
React	4 years
Docker	4 years

Location



Preferred Environment

Linux, Visual Studio Code, IntelliJ IDEA

The most amazing...

> ...project I've led is managing a software team to develop a software platform for an Industry 4.0 project for one of the world's largest agribusiness companies.

- Led the software team on an Industry 4.0 applied research project involving industrial automation, use of machine learning to optimize machinery setup, and computer vision for automated quality assessment.
- Developed sensor data collection and analysis tools based on Kafka and MongoDB that handled thousands of sensors running near real-time analytics.
- Projected a microservices-based architecture to integrate all the solution domains into a unified React-based web application, including real-time dashboards using WebSocket.
- Coordinated deliveries and the project's progress with the client, managing requirements and expectations.

Technologies: Java, Python, Apache Kafka, MongoDB, SQL, Linux, Docker, Apache Camel, Pandas, Software Architecture, REST APIs, OPC UA, Minio, Test-driven Development (TDD), JavaScript, React, Plotly, ECharts, WebSockets, Spring, Flask, Flask-RESTful, TypeScript, Git

Master's and Ph.D. Candidate

Federal University of Santa Catarina · 2014 - PRESENT

- Published papers on significant conferences such as IEEE Big Data and ACM DEBS, with research involving distributed graph processing, HDFS, Spark, and fault tolerance.
- Prepared and taught classes on parallel programming, MongoDB, Node.js, and React.
- Coordinated the execution of scientific experiments on AWS, collecting and storing data on MySQL and PostgreSQL databases for statistical analysis.
- Received scholarship from the Brazilian government for a semester of studies as a visiting student at INESC-ID, Portugal.

Technologies: Hadoop, Spark, Java, Python, HDFS, MongoDB, Node.js, Express.js, React, Distributed Computing, Fault Tolerance, Neo4j, Consensus Algorithms, Parallel Programming, Matplotlib, Plotly, Amazon Web Services (AWS), AWS, Serverless Architecture, Serverless, Git, PostgreSQL, MySQL

ASP.NET MVC and AngularJS.

- Developed a Drools-based business rules engine and a unified Apache Solr search engine for the solution.
- Projected and developed a web services-based integration layer for legacy applications.
- Managed and maintained SQL Server and MySQL databases, including performance tuning, backup policies, and advanced queries for BI applications.

Technologies: C#, IIS SQL Server, IIS 8, AngularJS, XML Web Services, Apache Solr, JBoss Drools, ASP.NET MVC, JavaScript, SQL, AWS EC2, AWS, Amazon Web Services (AWS), Git, MySQL

Software Engineer

Simple Technology · 2004 - 2009

- Developed corporate applications (WMS and ERP) and Pocket PC-based mobile applications.
- Developed an automated warehouse slotting system based on A* algorithm and configurable heuristics.
- Developed a 2D graphical visualization of warehouses and product placement.

Technologies: C#.NET, Delphi, SQL, ASP.NET MVC

Experience

Industry 4.0 Innovation Project

A microservices-based solution that integrated different domains of expertise into a unified software platform. The solution resulted from an applied research project for one of the largest agribusiness companies in the world (the name is under NDA). My role involved managing the project's software team and acting as a software engineer and software architect. Among the activities was integrating Java and Python-based microservices written by multiple teams within the project.

I also designed and developed an industrial sensor data collecting tool based on Apache Kafka and MongoDB capable of handling different protocols (OPC UA, REST, and MQTT) from thousands of sensors. The solution involved running advanced analytics algorithms to produce near real-time results. A React-based web application was developed as a user interface and included real-time monitoring dashboards built using WebSocket.

Libraries/APIs

Node.js, React, REST APIs, Flask-RESTful, Pandas, Matplotlib

Tools

Git, IntelliJ IDEA, Apache Solr, JBoss Drools, Plotly

Paradigms

Distributed Computing, Parallel Programming, REST, Test-driven Development (TDD), Microservices, Serverless Architecture

Platforms

Amazon Web Services (AWS), AWS EC2, Apache Kafka, Linux, Docker, Visual Studio Code

Other

Fault Tolerance, AWS, Back-end, Consensus Algorithms, Practical Byzantine Fault Tolerance (PBFT), Software Architecture, APIs, Serverless, Statistics, Cloud, OPC UA, XML Web Services, FastAPI, ECharts, WebSockets

Frameworks

Apache Camel, AngularJS, ASP.NET MVC, Flask, Spring, Hadoop, Spark, Django, Express.js

Industry Expertise

Security

Storage

MySQL, PostgreSQL, HDFS, Neo4j, MongoDB, Minio

Education

Ph.D. Degree in Computer Science

2016 - 2021

Federal University of Santa Catarina - Florianopolis, Brazil

Master's Degree in Computer Science

2014 - 2016

Federal University of Santa Catarina - Florianopolis, Brazil