

EDUCATION

Universidad de Chile

Computer Science Engineering

Santiago, Chile

Mar 2012 – Aug 2018

EXPERIENCE

Blissway

Software Engineer

Santiago, Chile

Oct 2023 - Now

- **Highway Safety:** Designed and developed features and improvements for safety enforcement in highways using cutting-edge roadside technologies and trip building.
- **Video Tolling Backend:** Designed and implemented the backend stack in charge of video tolling, including APIs, authentication, human review processing, and integration with roadside and toll collection services. Main technologies include Typescript, NodeJS, NestJS, Redis, Python, Celery, FastAPI, MongoDB, Postgresql, Docker, AWS.

Google

Software Engineer

Mountain View, CA

Sep 2018 - Jul 2023

- **Modern Creators & Formats, Google Search:** Tech-lead for modern Google Search features tailored for content creators, like YouTube Shorts and stories distribution and creation prompts for web and native. Also applied NLP techniques for fluent prompt generation.
- **People Search and Creator Channel, Google Search:** Designed and developed features for People Search cards and Creator Channel for Google Search, in which users can make their contact information and social profiles visible across Google Search and Discover; also built Golang metrics pipeline for internal analytics and user engagement.
- **Knowledge Panel Verification, Google Search:** Designed and developed features for knowledge panel (KP) verification (a.k.a. Claiming) in the world's most popular search engine, using cutting-edge web technologies. Also, developed a fully automated integration testing solution for KP Claiming, using Java and WebDriver. Finally, built a data analytics dashboard for KP Claiming metrics, using Google Cloud Platform tools like Looker Studio, Google Analytics, BigQuery and SQL.

Calce 3D

Software Developer

Santiago, Chile

Nov 2017 - Aug 2018

- **Desktop application:** Developed a Windows application for 3D scanning and integration with online healthcare services using Electron, React.js, Bootstrap, C#.

Telefónica Investigación y Desarrollo

Software Developer

Santiago, Chile

Mar 2017 - Jun 2017

- **Infrastructure as Code:** Development of software for creating Hadoop environments oriented to Big Data using Ansible, OpenStack, Ambari.

Center for Climate and Resilience Research (CR)²

Data engineer

Santiago, Chile

Sep 2016 - Jan 2017

- **Regional Climate Simulations:** Data management of NetCDF climate simulations, using Bash, Python, Linux.

Universidad de Chile

Assistant Professor, Computer Graphics, Visualization and Modeling for engineers

Santiago, Chile

Mar 2016 - Jul 2016

Universidad de Chile

Course Assistant, Software Engineering I

Santiago, Chile

Mar 2016 - Jul 2016

- **Github tool:** Development of visualization tool for GitHub project metrics, using Python, HTML, Javascript, Bootstrap.

Penta Analytics S.A.

Software Developer

Santiago, Chile

Sep 2015 - Dec 2015

- **Database Maintenance:** Development of web interface for update and validate database tables, using Python, Django, Javascript, Bootstrap, SQL.

Universidad de Chile

Assistant Professor, Computer Graphics, Visualization and Modeling for engineers

Santiago, Chile

Mar 2015 - Jul 2015

PROJECTS AND COURSEWORK

Engineering Thesis: Developed a type-based declassification inference system for Dart as my engineering degree thesis.
<https://github.com/matiasimc/TRNIdart>.

Scala course project: Development of web application with actor system using Scala, Play, Akka.

Distributed Systems project: Development of distributed Zatacka game using Java RMI.

LANGUAGES

English: Advanced

Spanish: Native

PROGRAMMING SKILLS

Languages: Java, Python, Scala, Dart, JavaScript, TypeScript, SQL

Technologies: React, Django, Git, Linux, OAuth