

Education

- **Pontificia Universidad Católica de Valparaíso (Chile)**
 - **Enrolled at:** Ingeniería Civil Informática (Software Engineering).
 - **Ingress:** March 2017.
 - **Graduation:** December 2022.
- **Liceo Santa Marta, Vallenar (Chile)**
 - **Graduation:** December 2013.

Experience

- **Degree Project**
 - Investigated the possibility of predicting Tsunamis for the coast of Valparaíso, using Deep Learning, together with my project partner. Additionally, we developed a neural network model capable of classifying maritime events as Tsunamis, based on the data obtained from the DART buoys provided by NOAA. Subsequently, we developed a model capable of predicting the behaviour of the waves, in search of a possible Tsunami, for a time frame of at least 5 minutes.
- **AC Perforaciones**
 - Developed a Deep Learning model that categorizes the company generated loss reports text's, in join with the metadata associated to the report.
 - Programmed a Kurento server to be able to stream videos, after applying an object detection filter to them (on the same server). Additionally, I developed my own ZeroTier server, in order to connect a Raspberry Pi, which retransmitted the video of a security camera attached to it, with the Kurento server. Finally I served this video on a dashboard built with React JS, which worked with a Node JS Websocket backend to handle connections to Kurento. Later I ported the dashboard to Vue JS.
- **Independent Work**
 - Developed API's with MERN Stack, as personal projects and a way to improve knowledge on the web developer area.
- **Research**
 - Studied the state of the art of Recommender Systems and how machine and deep learning improved these Systems. This was along with a teacher that acted as a supervisor. At the end of three months of study we created a model based on an article that used reviews and users to recommend products.
- **Shoesing**
 - A footwear e-commerce site that I built with a couple of friends, where your recommended articles were shown based on the product you saw (image recognition with convolutional neural network, CNN).
 - I planned, modeled, and programmed all the routines that extracted the data to feed the CNN model.
 - Worked for a year, then left the job to focus on my career and personal projects.
 - This project gained me a distinction in the "Lift me Up Internacional" tournament, where we were finalists and won a trip to Canada (for only a member of the team).

Skills and Interests

- **Technical**

- **Main Experience:** Python, Javascript, MongoDB.
- **Intermediate Experience:** Java, C, Lua, C++, PostgreSQL, PHP, Julia, Machine Learning, Deep Learning, React JS and Node JS.
- **Tools:** VSCode, Git, Excel, JetBrains Suite, Eclipse, Jupyter, TensorFlow, Keras, Scikit Learn.
- **OS:** Main experience with Windows, and Intermediate experience with Linux based OS (Ubuntu, Gnome and Kali).

- **Non-Technical**

- Patient person, who works as a team. In addition to always having a positive attitude, eager to learn and to be creative.

- **Language**

- Spanish (Native), English (B2).

- **Interests**

- Deep Learning, Machine Learning, Data Science, Programming, Web Developing, Web Scraping, Cybersecurity, Problem-solving.
- Improve knowledge on different areas (both at my career level and personal level).
- Cooking.