

INFORMATION

Contact

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ezb.io

Interests

Type Systems
Theorem Provers
Human-Computer Interfaces
Computer Science Education

SOFTWARE

Infrastructure

Kubernetes
Docker, Digital Ocean
AWS, GCP
WireGuard, Nginx

Stacks

PostgreSQL, Redis
React, Svelte
TensorFlow, PyTorch, Keras

COURSEWORK

Computer Science

Type Systems
Complexity Theory
Operating Systems
Machine Learning
Algorithms
Decidability & Tractability
Functional Programming
Graphics

Mathematics

Information Theory
Discrete Math
Model Theory
Abstract Algebra
Bayesian Inference
Game Theory
Real Analysis

Interdisciplinary

Biomolecular Computation
Biological Data Analysis

LANGUAGES

Fluent

English
Português

Proficient

Spanish

ENRICO ZANDOMENI BORBA

EDUCATION

California Institute of Technology (2019)
B.S. Computer Science

WORK EXPERIENCE

FOSSA Software Engineer (OCT 2020 - JAN 2023)

Led the development and customer feedback loop of an upcoming AOSP Monorepo product. Improved client-side scanning and UI of Monorepo by 30x through DB schema changes, algorithmic improvements, and cache pre-warming. Later led a broader UI revamp increasing page load and API response times by over 50x through a DB schema rewrite.

Google Software Engineer (SEP 2019 - SEP 2020)

Worked on the Interactive Questions team under Search. Improved the freshness of answers, created an automatic pipeline to initialize and monitor data, and built a cache system to dramatically speed up pipeline reruns.

Van Valen Lab Research Student (SEP 2018 - JUN 2019)

Used Machine Learning (CNNs & NNs) to perform segmentation and cell tracking on movies of biological cells. Greatly improved the cell tracking model accuracy on detecting divisions and created a (now patented) data curating tool to ease the manual correction of incorrect outputs.

Mitsubishi Engineering Intern in Japan (SUMMER 2018)

Worked on the systems division to create the infrastructure for sensor data collection and processing inside next generation vehicles. Constructed a model to detect drowsiness and impairment in drivers using biometric sensors and driving data.

Facebook Software Engineering Intern (SUMMER 2017)

Worked with the Search as a Service (SaaS) team. Wrote a scaled down version of the existing SaaS platform for teams looking to test out the service. This involved scripting (Bash/Python), data mining (MySQL, Hadoop, Hive), and building a web frontend (HHVM).

PROJECTS & LANGUAGES

Intuitive RUST

A library for creating text-based user interfaces. Inspired by React and SwiftUI, with features resembling functional components, hooks, and a declarative DSL.

rm.ezb.io TYPESCRIPT, REACT

An image-sharing service for sharing templates for the reMarkable tablet.

Tyme SWIFT, PYTHON, JAVASCRIPT

A hierarchical time tracker that lets you analyze how you spend your time. Accessible as an iOS app, on a terminal, and as a web-app.

Python-CRN PYTHON, SYMPY

A Chemical Reaction Network simulator presented as a Domain Specific Language. Supports stochastic and deterministic networks.

XaTeLite PYTHON, L^AT_EX, BASH

Pronounced "satellite". A L^AT_EX-over-HTTP workflow: Edit your .tex file over ssh and visit a website for the pdf.

Expert

Rust
Nix
Python 3+
PostgreSQL

Advanced

TypeScript
Golang
OCaml
Bash
Swift
Lean
C++
C

Basic

Haskell
Elixir
Java
Hack (HHVM)
R