Contact

Reach Me

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Find Me

ezb.io github.com/enricozb

Coursework

Computer Science

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

Mathematics

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

Interdisciplinary

Biomolecular Computation Biological Data Analysis

Software

Operating System

Linux (Ubuntu / Arch) Mac OSX Windows

Development & Workflow

mosh + tmux + kakoune git, mercurial, perforce Xcode, Atom, Sublime Text sway

Design

Photoshop CS6 Sketch 3

Office Tools

Apple Pages & Keynote GSuite MS Office Suite

Languages

Fluent

English Português

Proficient

Español

Basic

Japanese

Enrico Borba

Education

California Institute of Technology

B.S. Computer Science

(2015 - 2019)

Work Experience

Google Software Engineer

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

Van Valen Lab Research Student

(Sept 2018 - June 2019)

(Sept 2019 - Present)

Used Machine Learning (CNNs & NNs) to perform segmentation & 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 quickly correct incorrect outputs.

Mitsubishi Engineering Intern in Japan

(Summer 2018)

Worked on the systems division to create the infrastructure for sensor data collection & 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. I 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).

Google Software Engineering Intern

(Summer 2016)

Wrote an RPC (remote procedure call) tracing tool for the Vanadium project in Golang. Set up a protocol, "HTTP over RPC", which would serve HTML pages which contained data on the RPCs. I also worked with Google Street View to enable car operators to mark road conditions (dirt, private, or public) with a joystick.

Projects & Programming Languages

Tyme

Track your moments effortlessly. A non-intrusive time tracker that lets you analyze your life.

Myth

My attempt at the best programming language: writes like Python; runs like C; liberal like Javascript; safe like OCaml.

Pvthon-CRN

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

Crick

HQTrivia Human assistant: Using OCR from a continuous screen capture, provides short, expressive, and context-aware Google queries.

XaTeLite ("satellite")

LaTeX over HTTP workflow. Edit the source file over SSH and visit a website for the pdf.

Python 3.7+

Advanced

OCaml	••••
C++11	••••
JavaScript	••••
Processing	••••

Proficient

TOTICIOTIC	
Lean	•••00
Haskell	•••00
C	•••

Racio

Basic	
Swift	••••
R	•••00
Elixir	••••
Golang	••000
Hack (HHVM)	••000
Rust	••000
MATLAB	•0000