Conrad Heidebrecht

Candidate for Bachelor of Applied Science in Systems Design Engineering

🌐 conradheidebrecht.com ◯ github.com/eternali ▶ **ChipThink Studios**

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Professional Placements

- **Equibit Group AG** — Toronto, ON
  Javascript Developer at a cryptocurrency startup — *Sept. 2018 - Present*

- **Espial Group Inc.** — Ottawa, ON
  Server-side Cloud Developer at an IPTV SaaS provider — *Jan. 2018 - Apr. 2018*

- **University of Waterloo** — Waterloo, ON
  Computer Museum Technician — *Oct. 2016 - Sept. 2017*

Skills Summary

- **Mobile developer**: I am familiar with the Android SDK and enjoy cross-platform plugin and app development with Flutter and am published on Google Play.

- **Frontend developer**: I developed new features for the Equibit Wallet UI and was the sole developer for their block explorer. I am familiar with Vue, the DOM, CSS Grid, and Flutter, with several published projects, including my personal website, and many more in progress.

- **Backend developer**: At Espial I worked on commercial applications utilizing AWS to serve RESTful APIs; at Equibit I built public APIs in Node for their block explorer and wallet (served on IBM Cloud); and have many personal projects involving Node, Python and Kotlin.

- **Blockchain developer**: At Equibit I learned the inner workings of cryptocurrencies and helped build several low level utilities for manipulating transactions and blocks in Javascript.

- **DevOps and Infrastructure as Code**: I built and maintained the reliable and efficient development and deployment pipelines of both Espial and Equibit, this included provisioning infrastructure on AWS using Terraform, containerization with Docker, and continuous deployment with Jenkins and Gradle.

- **Rigorous tester**: I pioneered the use of Mocha/Chai at Espial and helped introduce full automated integration testing with Cypress at Equibit.

- **Data engineering**: I worked with MySQL at the UW Computer Museum, Elasticsearch at Espial, and use MongoDB at Equibit and in personal projects.

- **Low level programming**: I am currently learning how to parallelize computation with OpenCL and am reading the Linux kernel.

- **Agile team player**: I have been active in every scrum team I've been a part of, and have experience acting as team lead and/or coordinator in hackathons.

- **Skilled communicator**: At Equibit and the UW Computer Museum I was concise and informative when providing daily summaries to my supervisors.
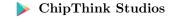
Education

- **University of Waterloo** — Waterloo, ON
  Candidate for Bachelor of Applied Science — *Sept. 2017 - present*

- **Rockway Mennonite Collegiate** — Kitchener, ON
  Ontario Secondary School Diploma — *Jun. 2017*

- **Machine Learning Course** — Coursera.org
  Stanford University — *Jun. - Sept. 2016*

Awards

- University of Waterloo President's Scholarship of Distinction — *Sept. 2017*
- Governor General's Award for Top Academic Achievement in Graduating Class (Rockway) — *Jun. 2017*

Programming Skills & Technical Interests

- **Languages**: Python, Dart, Haskell, C++, Javascript (ES8), Typescript, HTML/CSS, Solidity, Java, Kotlin, Groovy

- **Technologies**: Linux, Git, Arduino, Docker, Flutter, Web3.js, Truffle, Bitcoinjs-lib, Vue, JSX, Vuetify, Pug, Stylus, JQuery, DoneJS, Mocha, Chai, Cypress, Bootstrap, Webpack, Browserify, Pixi.js, Three.js, MongoDB, Express, Feathers, Nginx, Apache, Ktor, Flask, Tensorflow, AWS, Terraform

- **Hackathons**: I was a proud participant of JAM Hacks, Hack the North, and MLH Local Hack Day.

- **Machine Learning**: I enjoy learning about artificial intelligence through videos, research papers, tutorials and podcasts.

- **Linux & FOSS**: I patch & compile custom kernels and my home is the command line. My personal projects are open source, including several libraries I've written or contributed to.

- **Hardware**: I build custom quadcopters, computers, and things with Arduino.

Highlighted Projects

- **WAToPlan**: A crossplatform app built with Flutter, it is a flexible tool meant to help students manage their time, currently in open beta on Google Play.

- **Population Flappy**: A Flappy Bird-like simulation which a genetic algorithm learns, in real time, to master.

- **Countdown Manager**: A colorful Vue app for managing countdowns secured with JWT from a custom backend in Kotlin.

- **TicTacThrow**: Tic-tac-toe with a twist, written in Flutter.

- **conradheidebrecht.com**: My personal website built with Vue and Vuetify running on a VPS behind Cloudflare and uses an email API built in Python.

Interests & Activities

- **Cross-cultural experiences**: I have lived in three countries and have traveled to Europe, Africa and South America.

- **Personal fitness**: I don't miss a day at the gym.

- **Music**: I have played the alto saxophone in six different bands.