Tudor Brindus

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Professional Experience

Google   *Mountain View, CA*
Software Engineering Intern, ChromeOS Team   *Expected: May 2018 - August 2018*

Ivy Global   *Toronto, ON*
Software Engineering Intern   *September 2016 - **present***
- Overhauled the company's development practices to use continuous deployment on separate staging and production environments, including version control with a centralized git repository
- Implemented a ground-up rewrite and redesign of the company's main website, *ivyglobal.com*
- Automated the deployment of version control branches to SSL-enabled, authenticated subdomains
- Migrated over 50 production sites to Microsoft Azure with zero downtime, including a development VPN
- Screened, interviewed, assessed, and provided on-going guidance for new software engineering interns
- **Technologies used:** C#, ASP.NET MVC Razor, TSQL, LINQ, HTML, CSS/SASS, JavaScript/Node.js, Python

DMOJ: Modern Online Judge   *Toronto, ON*
Co-founder, Developer   *2014 - **present***
- Founded the DMOJ (*dmoj.ca*), an open-source platform for running programming contests, which has hosted over 150 competitions (including three national olympiads)
- Created a distributed code execution system capable of dynamically scaling to hundreds of nodes
- Implemented a sandbox for over 60 languages using a Linux syscall-based sandboxing approach
- Designed a responsive Django web frontend using modern web technologies
- **Technologies used:** Python, Django, MySQL, HTML/Jade, CSS/SASS, JavaScript/Node.js, Java, C/C++

Other Experience   *More at **tbrindus.ca/projects***

Developed and contributed to dozens of open-source projects on my Github profile, **Xyene**

Emulator.NES, a cross-platform **C# Nintendo Entertainment System and MOS 6502 CPU emulator**
- Supports 90% of all games ever published by emulating over a dozen proprietary hardware extensions
- Focuses on code clarity by abstracting hardware components, without sacrificing performance

Nitrous Emulator, a high-performance **Java Gameboy Color and Zilog Z80 CPU emulator**
- Implements fully timing-accurate Z80 instruction set and audio processor emulation
- Supports native rendering output via OpenGL, Direct3D, X, and GDI

JAVI, a **Java video transcoding library** based on FFmpeg
- Implements a fluent object-oriented API for interfacing with native functional JNA bindings
- Provides lightweight video playback integration for Swing, including audio-video syncing

Achievements
- 1st place team out of 400, ECOO 2015 and ECOO 2016 programming contests
- Member of the University of Toronto's ACM-ICPC team for 2016 and 2017

Education
University of Toronto   *Toronto, ON*
Hon. Bachelor of Computer Science   *2016 - 2020*
- Entrance scholarship recipient
- Expected graduation in June, 2020