# Justin T. Tran

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### **EDUCATION**

Cornell University Ithaca, NY Graduating December 2018

GPA: 3.55, Bachelor of Arts: Computer Science

#### **EXPERIENCE**

Motional.AI, Software Engineering Intern

New Brunswick, NJ

June 2017 – August 2017

- Worked on artificial intelligence approaches for embodied conversational agents
- Used C# to develop a signal processing and conflict resolution unit to interpret users' emotions and speech
- Wrote a classifier using Hidden Markov Models to identify transitions in a user's behavior over the course of a conversation

Cornell PRL Project, Undergraduate Researcher

Ithaca, NY

March 2017 – May 2017

• Integrated custom functions in GeoGebra with Java to help researchers build and edit mathematical proofs

Cornell Design & Tech Initiative, Front-End Dev Ithaca, NY

October 2016 - Present

- Built the front-end of a web application with HTML, CSS, and JavaScript to help Cornell students plan their semesters
- Worked with a MySQL database to save and load users' projects onto their personal profile

## **PROJECTS**

**DropBin** March 2017

- Coded an append-only, single-server minimalistic file backup system in Python
- Designed a backup server to accept connections from clients and synchronize file contents between machines

Unix Shell February 2017

- Created a basic Unix shell in C, supporting job control and signaling
- Parsed user input to interpret and execute a number of built-in and custom commands

Entropy

January 2017 – May 2017

- Developed a 2D puzzle platformer game in Java, running on the LibGDX engine
- Utilized the MVC pattern to optimize and structure the entire project
- Worked as project lead and as a programmer on a six-person team

Malloc

December 2016

- Composed and optimized a memory allocation library, based on the C standard library
- Produced code preventing memory fragmentation and increasing utilization and robustness

## **COURSES**

Analysis of Algorithms Data Structures and Functional Programming Operating Systems Natural Language Processing Computer Game Architecture Data Structures Digital Product Design

Computer System Organization and Programming

#### SKILLS

Languages and Technologies: C, C#, Java, Python, OCaml, HTML, CSS, JavaScript, Unix

Applications: Unity3D, Adobe Illustrator, Sketch