

# Justin T. Tran

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## EDUCATION

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<b>Cornell University</b>	Ithaca, NY	Graduating May 2019
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GPA: 3.55, Bachelor of Arts: Computer Science

## EXPERIENCE

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<b>Cornell CMSX</b> , Developer	Ithaca, NY	October 2017 – Present
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- Redesigned the UI and UX of Cornell's Course Management System, an application used by teachers and students to release and submit assignments across more than 40 courses
- Refactored thousands of lines of Java code in a legacy system to improve the efficiency of the website when creating and displaying new web pages

<b>Motional.AI</b> , Software Engineering Intern	New Brunswick, NJ	June 2017 – August 2017
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- 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

<b>Cornell Design &amp; Tech Initiative</b> , Developer	Ithaca, NY	October 2016 – Present
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- Built a web application to help Cornell students plan their semesters

## PROJECTS

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<b>Course Sweeper</b> • CourseSweeper.herokuapp.com	December 2017 – January 2018
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- Developed and deployed a web application with Flask to notify students when their courses have open seats
- Interfaced with a MySQL database to save and verify course and user information

<b>DropBin</b>	March 2017
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- 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

<b>Unix Shell</b>	February 2017
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- 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

<b>Entropy</b>	January 2017 – May 2017
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- Developed a 2D puzzle platformer game in Java running on the LibGDX engine
- Utilized the MVC pattern to optimize and structure the entire project

<b>Malloc</b>	December 2016
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- Composed and optimized a memory allocation library, based on the C standard library
- Produced code preventing memory fragmentation and increasing utilization and robustness

## COURSES

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Artificial Intelligence and Practicum	Natural Language Processing
Analysis of Algorithms	Computer Game Architecture
Data Structures and Functional Programming	Operating Systems
Computer System Organization and Programming	Data Structures

## SKILLS

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