

# Jacob Tran

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## Education

### **University of Colorado Boulder**

Bachelor of Science, Computer Science

**Aug '15 – May '19**

Major GPA: 3.6 - Cumulative GPA: 3.2

## Work Experience

### **Big Compass | Software Consultant**

**Jun '19 – Present**

Disney – Client Work (Webmethods (Java-based), Snowflake DB, AWS)

- ETL engineer - streamlined CSV, Excel and other non-standardized payment processor data files to Snowflake database. Responsible for standardizing different payment processor's data into one conformed database for future business applications.

## Projects

### **ProseAlign**

**Oct '19 – Present**

Global word-level sequence alignment

- Aligns Vietnamese translation of Harry Potter with a Google speech-to-text transcription of its corresponding Audiobook. Will be useful for future language learning tools.
- Char-level sequence alignment (Needleman-Wunsch) is too slow for larger text. By using word-level alignment you can find the word in which the sequence broke and then run char-level alignment to find the broken segment.

### **Universal Custom Video Playback Speed**

**Oct '19 – Dec '19**

Personal problem / project

- Created a Google Chrome extension to allow for custom video speed (i.e. 0.49x, 1.33x speed) on most HTML based video players.

### **Visual Tracking Analysis**

**Sep '18 – May '19**

Senior Project for Northrop Grumman

- Analyzed various deep learning models to identify and detect moving objects in videos. Compared the accuracy and efficiency of modern models and gave recommendations on recurrent neural networks for object identification and detection.
- Improved performance of vehicle detection to 93% accuracy compared to last year's team at 84%.

### **PlayerKnown Battlegrounds**

**Jan '18 – May '18**

Project for Data Mining Course

- Mined data from the popular video game, PlayerUnknown's Battlegrounds. Designed an in-depth survival guide pertaining to giving players the best tactics for surviving longer, managing weapons and planning path of travel.
- "Big Data" where information from over one million data points were mined.

## Technical Skills

**Languages** Python • Java • JavaScript • C++ • SQL • HTML/CSS

**Software Tools** GitHub/Git • AWS • WebMethods • Tableau • Snowflake DB • Splunk

## Certifications

**AWS** Certified Solutions Architect (Associate)

**Aug '19**