

Jacob Tran

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Education

University of Colorado Boulder

Bachelor of Science, Computer Science

Aug 2015 – May 2019

Major GPA: 3.6 - Cumulative GPA: 3.2

Work Experience

Big Compass | Software Consultant

Jun 2019 – Present

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

Jul 2019 – Present

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

Projects

ProseAlign

Oct 2019 – Present

Global word-level sequence alignment

Python

- 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 2019 – Dec 2019

Personal problem / project

JavaScript

- Developing a Google Chrome extension to allow for custom video speed (i.e. 0.49x, 1.33x speed) on most HTML based video players. To be released in the Chrome store – currently runs locally.

Visual Tracking Analysis

Sep 2018 – May 2019

Senior Project for Northrop Grumman

Python, PyTorch, Keras, Tensorflow, OpenCV

- 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 2018 – May 2018

Project for Data Mining Course

Python, Jupyter Notebook, scikit-learn

- 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 2019