ZHUOWEI **HUANG**

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EDUCATION

Master of Science in Computer Science   **Jan 2019 - Dec 2020**
University of Southern California — Los Angeles, CA
GPA: 3.85/4.0

Bachelor of Science in Computer Science & Music   **Aug 2014 - May 2018**
College of William and Mary — Williamsburg, VA
GPA: 3.80/4.0
Honors: Summa Cum Laude, Phi Beta Kappa, Mortar Board, Aurelia Behm Walford Scholarship

COMPUTER SKILLS

- Programming Languages (ordered by familiarity): Python, C++, Java, C
- Experienced in NoSQL databases: MongoDB, Neo4j
- Experienced in web crawler
- Familiar with Tensorflow Framework
- Fluent in Git
- Amazon Web Services Experience

PROJECTS

Difference As Repetition: A Polyphonic Midi Synthesizer & Sequencer
- Designed and developed a fully fledged multi-platform audio application based on JUCE framework, enabling artists to explore and evolve sounds through a live interaction of integration of a Midi synth and a step sequencer.
- Adopted by the music department as an interactive learning software for digital music production.

Object Detection Pipeline for Deer Activity Pattern Analysis
- Built a pipeline based on trained Faster R-CNN and Mask R-CNN models to generate time series and analyze deer activity patterns from captured images.
- Facilitated relevant researches in William & Mary department of biology.

Travel Companion
- Built a blockchain (Blockstack) based distributed travel document management and custom checkpoint infrastructure.
- Major League Hacking HackSC '19 Runner-up project.

Web Interface to Support Large Scale Mining on Github
- Cooperated on a team of five, implemented a web platform to query against GitHub's API and parse results into MongoDB.
- Provides data visualization and simple source code analysis such as abstract syntax trees extraction.

WORK EXPERIENCE

Software Engineer Internship   **May 2017 - Oct 2017**
Deepinv — Shanghai, China
- Developed and deployed distributed web crawlers using Python Scrapy and Scrapy-Redis, extracted data daily from over 10 different financial and news websites.
- Constructed Deepinv's initial MongoDB database for sentiment analysis.
- Created a demo knowledge graph with Neo4j based on Microsoft Concept Graph for querying concept hierarchy, sibling terms, etc., to be adapted by Deepinv on financial data.
- Delivered basic data pre-processing and cleanup, including categorization based on regex pattern matching.
- Automated translation of English document into Chinese through Baidu's translation API.