

Jesse Chan

jessechanwork@gmail.com | | [LinkedIn](#) | | [GitHub](#) | | www.jessechancy.com

EDUCATION:

Carnegie Mellon University, Pittsburgh, PA

May 2022 (expected)

B.S. Computer Engineering and Computer Science

Q.P.A.: 4.0

Relevant Technical Coursework: Introduction to Computer Systems (15-213, C), Natural Language Processing (11-411, Python), Parallel/Sequential Data Structures and Algorithms (15-210, SML/PML), Convolutional Neural Networks (cs231n online, Python), Principles Imperative Computation (15-122, C), Functional Programming (15-150, SML), Matrices and Linear Algebra, Probability Theory, Calculus in 3-D

EXPERIENCE:

Software Engineering CO-OP – SeekOut

August 2020 - Present

Software Engineering Summer Intern (Natural Language Processing Algorithms)

May - August 2020

- Developed recommendation system for job skills utilizing word2vec and joint representation learning models
- Established end-to-end pipeline to create profiles for 10 million StackOverflow users using C# and Google BigQuery
- Revamped African American image classifier with name based features, resulting in 10% increase in precision
- Designed parallel and concurrent algorithms to deal with processing large datasets in a multi-core environment
- Improved core GitHub to LinkedIn profile mapping algorithm accuracy by 9% and increased mapping counts by 14% through combination of a novel facial image similarity classifier with existing text features based classifier

Co-Founder – Paragon

June 2020 - Present

- Launched summer python bootcamp for 20 students, teaching everything from fundamentals to AI concepts
- Led course design, including well-documented homework projects such as Chess AI, Calculator, Calendar and Hangman
- Contracted by leading real estate firm Tishman Speyer to provide a 2-day bootcamp for data analytics and web scraping
- Facilitated sales and marketing of product, grossed ~\$5000 within weeks of launching

Software Engineering Intern – Clobotics

December 2019 – January 2020

- Developed demo SwiftUI IOS application for the Franklin project with LeanCloud and Realm databases
- Identified efficiency bottleneck in C++ image stitching SDK through XCode performance testing
- Proposed and implemented novel solution that resulted in 200%+ increase in the number of photos that can be stitched

Fundamentals of Programming and CS (15-112) Teaching Assistant – at Carnegie Mellon University

Fall 2019

- Taught object-oriented programming skills in python for up to 500 students through office hours and recitation
- Mentored 10 students on their final projects, overseeing their code design and documentation
- Held optional lectures on OpenCV and Cloud Computing for groups of up to 100 students

Computer Vision Software Research Intern – Hong Kong University of Science and Technology

July – August 2019

- Utilized siamese convolutional neural networks and achieved 70% accuracy in like-prediction on Instagram
- Generated Instagram image dataset of 200,000+ images from top 1,000+ influencers

PROJECTS (more on GitHub):

Question Answer Generation System (qa-nlp), [Watch the Video](#) or [See the Code](#)

Spring 2020

- Developed a text-to-question generation system on Docker with nlp tools such as NLTK, SpaCy and CoreNLP
- Knowledgeable about intermediate natural language processing tasks such as named entity recognition, coreference resolution, and part-of-speech tagging

Movie Poster Recognition/Recommendation System (MovieAssist), [Watch the Video](#) or [See the Code](#)

Spring 2019

- Generated pipeline with OpenCV, EAST text detector and Tesseract OCR to recognize text of movie posters
- Built recommendation system for detected movies using associative rules on the MovieLens dataset

SKILLS AND AWARDS:

- **Programming Languages:** Python, C, C#, C++ , Standard ML, Parallel ML, SQL, Swift, Javascript (React), HTML5/CSS
- **Data/ML:** Pytorch, Tensorflow, NumPy, Pandas, Scikit-learn, NLP Packages (NLTK, sPaCy, gensim)
- **Tools:** LaTeX, Linux, Bash, Git, VSCode, LeanCloud, Realm, Xcode, Azure, Google Cloud, AWS
- **Awards:** Dean's List (all semesters), 2nd Place Overall for an AR drum system at Hack-112
- **Natural Languages:** English (native and fluent), Mandarin (fluent), Cantonese (working proficiency)

EXTRACURRICULARS:

- **Team Lead, Power** – Carnegie Mellon Solar Racing
- **Member** – Data Science Club, Kappa Sigma, Carnegie Involvement Association, CMU Innovation and Entrepreneurship