JUNKANG GU

(585)503-2162 • jgu8@u.rochester.edu • https://github.com/JKGu

EDUCATION

University of Rochester **Rochester, NY**

Bachelor of Science in Computer Science *Anticipated 2021*

- Minor in Brain and Cognitive Science, Cluster in Economics and Philosophy
- Major GPA 3.83, Dean's List

Udemy Online Course

iOS 11 & Swift 4 - The Complete iOS App Development Bootcamp *2019*

- Independently studied industrial mobile app development

EXTRACURRICULAR PROJECTS & WORK EXPERIENCES

Vice President of Engineering Club in Tianyi High School *September 2014-June 2017*

- Expanded the club from 2 members to 25+ members by promoting to incoming students in club fairs
- Initiated and led group projects on robotics

Project Flounder *May - July 2019*

- Independently developed a Java project based on the Genetic Algorithm and Machine Vision that optimizes the visual concealment of a camouflage pattern given target environment samples from users
- Optimized fitness function by simulating human vision

Research Assistant, UR Human Computer Interaction Lab *October 2019 - Present*

- Collected data of hundreds of debaters for analysis, developing a program for automated speech evaluation
- Analyzed speakers' performance by extracting features from videos

IN-CLASS PROJECTS & RELEVANT COURSEWORK

University of Rochester **Rochester, NY**

Relevant Coursework *Fall 2017-present*

Mathematical Logic • Web Development • Artificial Intelligence • Knowledge Representation & Reasoning in AI • Computer Models of Human Perception & Cognition • Design & Analysis of Efficient Algorithms

Street Mapping Project *March 2018*

- Developed a mapping program in Java that plots maps and determines the shortest path between two arbitrary intersections implementing Dijkstra's algorithm.
- Enhanced efficiency by adding A* search algorithm during the AI course in 2019

Computation and Formal System Projects *October 2018*

- Implemented finite automaton and context-free grammar parsers, i.e. DFAs, NFAs, RDPs, TDPs, PDAs, and NFA-DFA converters using C.
- Built a SQL style database using C.

Uncertain Inferencer Project *April 2019*

- Led group projects a set of generic inferencers that solves probability inference problems using enumerations and sampling.

Simple Unix Shell Project *April 2019*

- Collaborated on a simple Shell program that can process foreground and background processes as well as handling incoming signals.

SKILLS

- Programming Languages: Java, C, Lisp, Python, Swift, HTML, CSS, SQL, Javascript
- iOS App & Web Development
- Field Programmable Gate Arrays
- Microsoft Office