Kevin Gu

Computer Science Major @ University of Illinois Urbana-Champaign
Eager to learn and looking for an entry level software development position
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EDUCATION

Undergraduate in Computer Science

University of Illinois Urbana-Champaign
08/2020 – Present *GPA: 4.0*
Relevant Courses:

- CS 361 – Prob & Stat for Computer Sci
- CS 225 – Data Structures
- CS 173 – Discrete Structures
- CS 126 – Software Design Studio

High School

Thomas Jefferson High School for Science and Technology (TJHSST)
08/2016 – 05/2020 *GPA: 4.41*
Relevant Courses:

- Artificial Intelligence I & II
- Parallel Computing I & II
- APCS A + Data Structures
- Research Stat I
- Multivariable Calculus
- Linear Algebra

RESEARCH EXPERIENCE

Research Intern

Children's National Hospital Research Center for Genetic Medicine
06/2019 – 08/2019
Achievement/Tasks:

- Data Analysis – discovered a peculiar trend in microglia count hinting at significant results for a Multiple Sclerosis medicine

Contact: Dr. Susan Knoblach

Senior Researcher

TJHSST Neuroscience Senior Research Lab
08/2019 – 05/2020
Achievement/Tasks:

- Spearheaded a computational neuroscience project: The Identification of the Critical Flicker-Fusion Frequency in *Drosophila melanogaster*
- Applied electroretinography to measure fruit-fly retinal nerve action potentials
- Data Analysis – computed when action potentials degraded to produce persistence of vision

Contact: Dr. Laura Locklear

TECHNICAL SKILLS

General Software Engineering
Human Centered Design, Software Development Life Cycle, Java, JUnit, JavaDoc, C++, Catch2, GDB, GitHub, cinder, Arduino, JSON, SSH/Virtual Machines, Linux (ubuntu, Amazon Linux 2), MATLAB

Artificial Intelligence
Python, informed search, modeling, heuristic development, Keras, Tensorflow, Google Collab, fast.ai, image classification

Web Development
Angular 11, Typescript, HTML, CSS, JavaScript, MySQL, Flask, Beautiful Soup

Parallel Computing
C, MPI

CERTIFICATES

AWS Certified Solutions Architect – Associate
(01/2021 – Present)

PROJECTS

Coursework

- Maze builder and solver – C++
- Multiple image manipulation programs utilizing various data structures – C++
- Halftone image generative art using dynamic particles – C++
- Text-based adventure game with graphical interface – Java
- Hall-of-Famer for course wide Mineopoly 3.0 strategy competition – Java
- Spacecraft flight path modeling and ray tracing renders using TJHSST parallel computing resources – C
- Implemented AI algorithms to generate, play, and optimize games such as Rush Hour, Sudoku, TicTacToe, Othello, Crosswords, etc. – Python

Hackathons

- VandyHacks VII: Alexa skill recommending credit card to use to maximize rewards – Python, Amazon Alexa, AWS Lambda
- HackTJ 6.0: Fannie 500, predicts and displays housing sales for the 500 most populous US cities – Python, HTML

Personal

- Personal Website (Coming Soon!) – Angular11
- Market Analysis programs to help father make business decisions – Python, Yahoo Finance API, Flask