HENRY KAM

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EDUCATION

New York University Present - 2025
B.S. in Computer Science, Minor in Mathematics *GPA: 3.9*

· Relevant Coursework: Data Structures and Algorithms, Object Oriented Programming, Discrete Mathematics, Linear Algebra and Differential Equations, Computer Architecture.

DeepLearning.AI Jun 2022
Certificate in Neural Networks and Deep Learning

University of California, Berkeley Sep 2021 - Dec 2021
Certificate in Full Stack Web Development

· Topics Covered: Browser Based Technologies, Relational Databases, API Design, Server Side Development, Deployment and Delivery

PROJECTS

Book Search Engine HTML, CSS, JavaScript, NoSQL
https://github.com/gulpinhenry/book-search-engine

· Engineered a user-based book search engine utilizing the Google Books API, where users could save favorited books. Built with MongoDB, Express.js, React.js, Node.js, Apollo Server, bcrypt, GraphQL, JSON Web Token, Material UI, Mongoose.

Cryptocraft HTML, CSS, JavaScript, NoSQL
https://github.com/gulpinhenry/cryptocraft

· Implemented a cryptocurrency investment simulator where users can manage portfolios from Coinbase API's real time data. Built with MongoDB, Express.js, React.js, Node.js, Apollo Server, Axios, bcrypt, Chart.js, GraphQL, JSON Web Token, Material UI, Mongoose, Robo 3T.

Flappy Bird AI Python
https://github.com/gulpinhenry/flappy-bird-ai

· Recreated the Flappy Bird game and applied the NEAT machine learning algorithm to teach artificial intelligence to play Flappy Bird. Incorporated object-oriented design while programming game. Utilized NEAT-Python, Pygame.

EXPERIENCE

New York University Apr 2022 - Present
Research Assistant *Brooklyn, New York*

· Worked under Ph.D student Yunxiang Zhang, using PyTorch, Visdom, Tensorboard to study physical haptics realism in virtual reality.

· Assisted Projects: Surface EMG-based Gesture Recognition, Geometric Wave Acoustic Synthetic Impulse Responses.

San Jose State University - Computational Materials Research Lab Jan 2020 - Dec 2021
Research Intern *San Jose, CA*

· Advised by Dr. Santosh KC, focused on understanding electronic, optical, and magnetic properties of various materials for novel device applications.

· Utilized machine learning correcting algorithms and quantum computing software to analyze electrical and ionic conductivity of Silicene, the two-dimensional form of silicon. Acquired articulate communication skills.

TECHNICAL SKILLS

Languages	C++, HTML/CSS, Java, JavaScript, MATLAB, Python, SQL
Frameworks/Technology	Django, GraphQL, Linux, MySQL, NumPy, PyTorch, REST
Skills	Agile, Linting, Mandarin Chinese