# HOJOUNG JANG

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## EDUCATION

**Purdue University, West Lafayette, IN** *Class of 2021 (Expected)*
**Bachelor of Science in Computer Engineering** **GPA: 3.85/4.0**

## SKILLS

**Software Skills:**

- C/C++, Python, MySQL/SQL, Bash, MATLAB, HTML and CSS (Basic)

## PROJECTS

**CAM2 Research Team,** *Purdue University* *May 2019 – Current*

- Contributed with the Image Database Team to build effective **real-time video stream feature indexing storage system** using **Python**, **MySQL/SQL**, **Vitess**, **MinIO** and **Docker**
- Designed a fast and optimized video indexing system that could **respond in seconds** to user/client request for specific **featured images**
- Managed **Python** code with **OpenCV** that can download snapshots from IP cameras
- Developed a basic design to **scale** the system with multiple cameras using **multiprocessing** library in Python

**Game Master AI** *May 2019 – Current*

- Utilized **Reinforcement Learning** to design an algorithm that can interact with new environment and play with various games in **OpenAI-Gym**
- Acquainted with the design to handle both **discrete and continuous state** environment, **Q-learning** and **replay buffer**
- Experimented with a simple Q-learning algorithm to **Deep Q-learning** algorithm using **Tensorflow**

**Magic Mirror** *May 2019*

- Designed and built a mirror screen that displays useful information such as time, weather forecasts and Google news headlines

**Portfolio Website** *August 2019*

- Utilized **HTML, CSS** and **Javascript** to build personal portfolio website that can showcase myself

## Relevant Courses

**ECE 26400 Advanced C Programming** *Fall 2018*

- Acquired how to work in Linux environment, using **UNIX**, **GDB**, and **Makefile** to manage and develop programs in **C**.
- Analyzed **recursive programs** using GDB and mapping call stack
- Implemented structures and dynamic data structures such as **linked list** and **binary tree**

**ECE 36800 Data Structure** *Spring 2019*

- Acquainted with the use of data structures such as **stacks, queues, lists, trees, graphs, sorting, searching and hashing**
- Analyze **time and space complexity** of algorithms
- Built programming projects on topics such as **Huffman encoding, data sorting** and **shortest path** by applying **data structures**

## ACHIEVEMENTS

**Dean's List & Semester Honors,** Purdue University *Fall 2018 & Spring 2019*

- Awarded Dean's List & Semester Honors