Kevin Kuo

linkedin.com/in/kevinkuo52 | kevintkuo.com | github.com/kevinkuo52
ktk5135@psu.edu | 929-286-6373

EDUCATION

THE PENNSYLVANIA STATE UNIVERSITY | B.S in Computer Science — Expected May 2021
College of Engineering | University Park | State College, PA | GPA: 3.02 / 4.0

SKILLS

Python < Preferred > // Java // Node.js // JavaScript // C // C++ // Linux // OpenCV // Tensorflow

WORK EXPERIENCE

LUNAR LION | Software Engineering Intern — May 2018 – present | Research Center C, State College, PA

- Worked on the software for Peroxide Engine Test Stand 2.
- Used ZeroMQ to create communication system between the Ground Control Station and Guidance, Navigation, and Control subsystem.
- Implemented softkill to prevent hazard by processing thermocouple, pressure transducer and load cell data.
- Debugged the old UI of Ground Control Station and added flight profile functionality to automate testing procedure.
- NASA PA Space Grant Scholarship

DULANEY HIGH SCHOOL | IT Assistant — Aug 2016 - May 2017 | Lutherville-Timonium, MD

- Provided troubleshooting of any computer problems the school encountered.
- Replaced and fixed nonfunctional computer parts and software.

OTHER EXPERIENCES

NITTANY DATA LAB | Disney Corporate Project Team — Aug 2017 – Present | State College, PA

- Created retrieval based chatbot with personalities based on Disney movie characters.
- The Chatbot was proposed to the Director and Manager of the Data & Analytics at Walt Disney, which received promising continuation of the project.

STUDENT SPACE PROGRAM LABORATORY — Feb 2017 – Present | State College, PA

- Student Training Program: Wrote the teensyduino code which collected, processed, stored, and transmitted data from the rocket that was launched to 500 meters above sea level. | Feb - Apr
- G-Chaser: a joint mission between NASA, JAXA, and University of Oslo to study solar flares by launching rockets into the ionosphere.
- Worked under the Command and Data Handling Subteam - contributed to the UART Class by debugging and configuring the termios bit flags based on the known hex configuration values. | May - Present

UNMANNED AERIAL SYSTEM | Computer Vision Sub team — Aug 2017 – Present | State College, PA

- Writing drone's software to detect targets on the ground given the camera feeds.
- Using OpenCV's saliency algorithm to extract the relevant areas of interests in the images.
- Building Convolution Neural Network to categorize the interest images.

VEX ROBOTICS WORLD CHAMPIONSHIP | Software Mentor — April 2017 | Louisville, Kentucky

- Autonomous mode utilizes the PID Control Algorithm for enhancing mechanical precision.
- Actuated mechanical parts of the robot with customized algorithms.
- Velocity control system of the drivetrains and flywheels which also utilizes the PID.

PROJECT

FACEBOOK AI CHATBOT | Response Generation & Sentiment Analysis — July 2017 – Present

- Utilizes Messenger's UI to generate conversations with users and perform sentiment analysis on each utterance.
- Using Sequence to Sequence model with attention decoder to generate response based on the previous utterance of the user input, currently working on implementing beam search to eliminate the greedy response approach.
- The neural network is written in python with Tensorflow using the starter code from Stanford CS 20SI's assignment, and the backend is written in node.js with Facebook Chat API.