Jiawei He

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EDUCATION

University of Pennsylvania, School of Engineering & Applied Science – Philadelphia, PA Expected: **May 2023**
Master of Science in Engineering in Scientific Computing (Computational Science) Cumulative GPA: 3.83/4.00

Florida Institute of Technology, College of Engineering and Science – Melbourne, FL **June 2021**
Bachelor of Science in Mechanical Engineering Cumulative GPA: 3.96/4.00

Wuhan Institute of Technology, School of Optical Information and Energy Engineering – Wuhan, China **June 2019**
Bachelor of Science in Energy and Power Engineering Cumulative GPA: 3.3 /4.00

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, C/C++, Golang, MATLAB
Frameworks: Spring Boot, Spring Data JPA, Spring Security, Hibernate, React, Node.js, PyTorch, TensorFlow, Node-RED
Others: MySQL, MongoDB, ProtoBuf, gRPC, Git, Linux, HTML, CSS, TCP/IP, VLAN(802.1Q), WireShark

RELEVANT COURSEWORK

Computer Science: Algorithms and Computation, Programming for The Web, Applied Machine Learning, Machine Perception, Brain-Computer Interface, Programming Languages & Techniques, Artificial Intelligence, Big Data Analytics, Computer Vision & Computational Photography.
Math: Calculus, Differential Equations, Linear Algebra, Statistics and Probability.
Business: Basic Economics

PROJECTS

CampusSale (Java & JavaScript) | Individual project | Philadelphia, PA **June 2022 – Present**
• Developed app for student to sale their unused stuffs around the campus when they are graduating or moving
• Designed and built a single page web application using React.js, Material UI, JavaScript, CSS, and HTML
• Implemented RESTful API through Spring Boot, Spring Security, Spring Data JPA, Hibernate, MySQL

Florida Tech Course Plan (Python & JavaScript) | Individual project | Philadelphia, PA **June 2022 – Present**
• Provided an interactive web app for student to select course and sections for their upcoming semester
• Parsed the around 7500 sections 150 pages of courses through BeautifulSoup4 and Regex
• Saved 80% of parsing time by adopting Python's Asynchronous I/O

Talker (JavaScript) | Programming for The Web course project | Philadelphia, PA **September 2021 – December 2021**
• Teamed up with 3 to implement a comprehensive social platform application (Include: Chat, Tweet, and Group Chat)
• Designed the RESATful APIs by Swagger Hub and implemented them through Node.js Express.js
• Utilized Figma interactive wire frames to design the user experience (UX)

Prediction of Finger Flexion (Python) | Brain Computer Interface course project | Philadelphia, PA **March 2022 – May 2022**
• Created a algorithm to predict the finger flexion behavior with 45% of correlation (near 0 without processing) as a team of 2
• Utilized Python, Numpy, Scipy, Scikit-learn, TensorFlow Keras API, for composing the algorithm and tuning the parameter

IoT Environmental Chamber (Python & C) | Senor Design Project | Melbourne, FL **September 2020 - May 2021**
• Collaborated with team of 7 to build a Internet of Things Environmental Chamber for plant research
• Used Node-RED & Arduino nano to control 4 ways to LED lighting concurrently

LEADERSHIP & VOLUNTEER EXPERIENCE

Chinese Students and Scholarship Association | Member | Melbourne, FL **May 2020 – June 2021**
• Familiarized new international students with American college system and life.

HONORS & ACTIVITIES LEADERSHIP & VOLUNTEER EXPERIENCE

Phi Kappa Phi Honor Society
• Membership is by invitation only to Florida Tech's top 7.5% of second-term juniors and the top 10% of seniors and graduate students

Distinguished Student Scholar Award
• Completed more than 55 credit hours at Florida Tech with cumulative GPA over 3.8.

Dean's List
• From January 2020 to June 2021