## ZEYU HE

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#### **EDUCATION**

## Pennsylvania State University, University Park

Expected May 2027

Second-year Informatics Ph.D. Student,

GPA: 4.0/4.0

Advisor: Dr. Ting-hao (Kenneth) Huang

## University of California, Irvine

September 2016 - June 2020

B.S. Computer Science and Engineering

B.S. Civil Engineering

GPA: 3.74/4.0

#### RESEARCH INTEREST

Human-Computer Interaction Natural Language Processing

#### **PUBLICATIONS**

- Jakob Hederich, Shreya Ghosh, **Zeyu He**, Prasenjit Mitra. Lumos in the Night Sky: AI-enabled Visual Tool for Exploring Night-Time Light Patterns In The 32nd International Joint Conference on Artificial Intelligence (IJCAI-23) (Under Review in Demonstration track)
- · Lyuyang Hu, Omkar Pathak, **Zeyu He**, Hunkyu Lee, Mina Bedwany, Jace Mica, Peter J Burke. "CloudStation:" A Cloud-Based Ground Control Station for Drones In IEEE Journal on Miniaturization for Air and Space Systems 2.1 (2020): 36-42.

## WORKING EXPERIENCE

## Software Development Engineer

Feb 2022 - Aug 2022 *Irvine*. *CA* 

• Agile software development to design and implement massively scalable Amazon Music service.

- Use of object-oriented programming languages, web frameworks, and libraries.
- DevOps tools and practices including infrastructure as code, version control, CICD, automated testing, and service monitoring, etc.

#### Software Engineer

Aug 2020 - Feb 2022 Fountain Valley, CA

Personable

Amazon

- Researched and designed scalable apps for image processing, data extraction, and data management.
- Tested troubleshooting methods and documented resolutions in the knowledge base; gathered and managed information on integration issues/vulnerabilities to contribute to daily development plan meetings.
- Conducted QA for monthly software releases based on an agile life cycle.

### TEACHING EXPERIENCE

### Teaching Assistantship

Aug 2022 - Present State College, PA

Pennsylvania State University, University Park

- IST 554: Networking Management
- DS 220: Data Management for Data Science

## Academic Tutor (Remote)

Gravitee Tutor Alliance

Sep 2020 - Dec 2021 Guangzhou, China

- Tutored 4 students in subjects relevant to computer science: data structure, AI, and machine learning.
- Evaluated students' learning styles and personalized teaching approaches for optimal learning experiences.

#### RESEARCH AND PROJECTS

### Senior Design Project: CloudStation

Oct 2019 - March 2020

Electronic Engineering and Computer Science Department, UC, Irvine

Irvine, CA

- Used Scrum to design a real-time, cloud-based station web app for hundreds of drones.
- Made full-stack development on the Django framework, Channels, Redis, AWS RDS, and Bootstrap that can display the location of the connected drones and drone information on Mapbox and provide users with the command box and result box to interact with the connected drones.

# Picard (Patient Initiated Controlled Analgesic Remote Dispenser)

Oct 2018 - June 2020

Engineering Technology and Application Design at Calit2, UC, Irvine

Irvine, CA

- Designed a medical system to ensure prescription opioid drugs were consumed accurately and safely by patients and to record drug effectiveness on patients' pain levels.
- Implemented Wi-Fi module and MySQL protocol to make connections between the ESP32 board and server in real-time, allowing the ESP32 board to display up-to-date information and update data on request.

#### AWARD AND HONORS

UC Irvine Dean's Honor List (11 times)

2016-2020

#### **SKILLS**

**Programming Language:** Python, C++, Kotlin, Java, C, Verilog, Visual Basic, Matlab

Tools and Frameworks: TensorFlow, PyTorch, scikit-learn, SatScan