

ZEYU (STEVEN) HE

+1(949) 771-5542 ♦ State College, PA

zmh5268@psu.edu ♦ [linkedin.com/in/zeyu-he](https://www.linkedin.com/in/zeyu-he) ♦ [stevenhe918.github.io/](https://github.com/stevenhe918)

EDUCATION

Pennsylvania State University, University Park

August 2022 - May 2026 (anticipated)

Third-year Ph.D. Student,

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

I am deeply passionate about the fields of **Natural Language Processing (NLP)** and **Human-Computer Interaction (HCI)**. My research involves collaborating with online crowd workers to evaluate their performance in comparison to Large Language Models.

PUBLICATIONS

- **Zeyu He**, Saniya Naphade, Ting-Hao K. Huang. *Prompting in the Dark: Assessing Human Performance in Prompt Engineering for Data Labeling When Gold Labels Are Absent* (CHI 2025)
- **Zeyu He**. *Human Involvements in Data Annotation in the Era of Large Language Models* (HCOMP DC 2024)
- Ho Yin Ng, **Zeyu He**, Ting-Hao K. Huang. *What Color Scheme is More Effective in Assisting Readers to Locate Information in a Color-Coded Article?* (VIS 2024)
- Shih-Hong Huang, Ya-Fang Lin, **Zeyu He**, Chieh-Yang Huang, Ting-Hao K. Huang. *How Does Conversation Length Impact User's Satisfaction? A Case Study of Length-Controlled Conversations with LLM-Powered Chatbots* (CHI LBW 2024)
- **Zeyu He**, Chieh-Yang Hunag, Chien-Kuang (Cornelia) Ding, Shaurya Rohatgi, Ting-Hao (Kenneth) Huang. *If in a Crowdsourced Data Annotation Pipeline, a GPT-4* (CHI 2024)
- Jakob Hederich, Shreya Ghosh, **Zeyu He**, Prasenjit Mitra. *Understanding the Night-Sky? Developing AI-Enabled System for Exploring Night-Light Usage Patterns* (IJCAI 2023)
- 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

Amazon

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

Personable

Fountain Valley, CA

- 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

Research Assistantship

Pennsylvania State University, University Park

Jan 2024 - Present

State College, PA

Teaching Assistantship

Pennsylvania State University, University Park

Aug 2022 - Dec 2023

State College, PA

- IST 554: Networking Management
- DS 220: Data Management for Data Science
- DS 300: Privacy in 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

Electronic Engineering and Computer Science Department, UC, Irvine

Oct 2019 - March 2020

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)

Engineering Technology and Application Design at Calit2, UC, Irvine

Oct 2018 - June 2020

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.

PROFESSIONAL ACTIVITY

Conference Paper Reviewer: CHI LBW 2024, Learning @ Scale 2024

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