ISABEL SIEH

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EDUCATION

Stanford University   Stanford, CA
B.S. and M.S. in Computer Science (AI Concentration)   *September 2021 – June 2026*
  Relevant Courses: NLP with Deep Learning, Robot Perception, Deep Learning for Computer Vision, Data Management and Systems, Design and Analysis of Algorithms, Web Applications, Operating Systems Principles, Intro to Computer Graphics and Imaging, Intro to Earth Systems, Intro to Urban Studies, Principles of Economics

RELEVANT EXPERIENCE

The New York Times (nytimes.com/by/isabel-sieh)   New York, NY
Software Engineer, Interactive News Technology Team and AI Initiatives   *June 2024 - August 2024*
- Built robust, fault-tolerant JSON data feeds of live EU and UK election results using Typescript, acheiving 867k+ views
- Worked with AI Initiatives to develop a visual search tool for Visual Investigations using FastAPI, Svelte, and a multimodal model
- Contributed full-stack development for Olympics results and interactive assets, garnering 1.6m+ views and homepage features
- Supported reporters with data analysis including for US presidential race and AI-driven document pattern identification

Intelligent Robotic Interaction at Scale (IRIS) Lab, led by Prof. Chelsea Finn   Stanford, CA
ML and Robotics Researcher | Published in RSS 2024 Workshop   *October 2023 – February 2024*
- Compared simulation versus real-world as evaluation methods for training vision-based robotic manipulation policies
- Created 3D models and simulations, scripted CV tools, tested policies, participating in weekly ML paper reading group

Independent Project, Stanford Clayman Institute for Gender Research   Stanford, CA
Natural Language Processing (NLP) Researcher | Susan Heck Scholar   *June 2023 – August 2023*
- Computed multilingual sentence embeddings for unsupervised topic clustering analysis on 70k Facebook texts in Python
- Developed a web app (philippine-presstitutes.github.io) in HTML and JavaScript featuring 10 NLP data visualizations

Stanford Human-Centered Artificial Intelligence   Stanford, CA
Lead Full Stack Developer | Published Researcher in 4 works   *February 2022 – June 2023*
- Built full-stack web app teaching AI literacy including a multiplayer game with React, Google OAuth, D3.js, and Firebase

Proof of Learn (EdTech and Video-Game Startup)   New York, NY
Software Engineering and Product Intern   *June 2022 – August 2022*
- Coded the REST API with Typescript and implemented a MongoDB and PostgreSQL database for the game world
- Pitched product demo 14 times to 15k+ people and gained 1k+ users and lectured an online blockchain course for 5k+ students

Stanford Computer Science Department   Stanford, CA
Section Leader (Teaching Assistant) for CS106A/B   *December 2021 – August 2023*
- Taught, graded assignments, held debugging and problem-solving office hours and graded exams for 500+ students on Python programming methodologies and C++ data abstractions

The Coding School   Manila, Philippines
Startup Founder   *October 2017 – Present*
- Created a profitable global (10+ countries) coding and design after-school and summer camp provider connecting 3000+ students with 100+ trained teachers from top universities in the Philippines through 40+ courses to date

RECENT RESEARCH AND PROJECTS

SaveFace: Controlling Face in Image Diffusion Models   April 2023 – June 2023
- ControlNet-based text-image diffusion model using image pre-processing to preserve facial features and mitigate social biases

NatuRel: Advancing Relational Understanding in Vision-Language Models   April 2023 – June 2023
- Created 100k image-text dataset and fine-tuned VLMs, achieving state-of-the-art visio-linguistic compositional reasoning

Campus Crimewatch (campus-crime-watch.github.io/)   April 2023 – June 2023
- Geo-coded and ran geo-spatial analysis on campus crime data resulting in a web-app which included an interactive map

Banatao Scholar   April 2023 – June 2023
- Proposed AI model for predicting typhoon damage in the Philippines, using satellite imagery; presented to X (Google) experts

SKILLS AND AWARDS

Awards : Columbia-Stanford Brown Institute Grant Awardee for NLP Entity Extraction, Citadel Women's Datathon Invitee
Languages: Python, C/C++, Typescript, Javascript, Java, HTML/CSS   **Libraries**: D3.js, React, OpenCV, Hugging Face
Frameworks and Software: PyTorch, REST, Node.js, MongoDB, SQL, GoogleAPI, Git, VSCode, Blender, Tableau, Figma, Isaac Sim