

Qianheng Xu

908-376-9426 | hendry.x.2026@gmail.com | [linkedin.com/in/hendryxu](https://www.linkedin.com/in/hendryxu) | github.com/justanotherinternetguy

EDUCATION

Cornell University

Computer Science & Linguistics

Ithaca, NY

Expected Graduation 2030

Millburn High School

Graduating Honors Class of 2026

Millburn, NJ

Sept. 2022 – June 2026

RESEARCH

StutterZero & StutterFormer: End-to-End Speech Correction for Stuttering

Sept. 2024 – Present

- Developed encoder-decoder and Transformer models using Pytorch to transcribe and correct stutters from speech signals
- Introduced & published the first end-to-end model for stutter correction, US Utility Patent #19/288,365 under review
- <https://ieeexplore.ieee.org/document/11288978>
- github.com/justanotherinternetguy/StutterZero

XSpeech: Multi-Branch Learning for Multi-Class Stuttering Classification

Sept. 2023 – April 2024

- Built CNN-LSTM multi-branch model using Tensorflow to classify and diagnose stuttered speech
- Published in the National High School Journal of Science
- github.com/justanotherinternetguy/XSpeech

μ Lang – Generating a Morphologically Average Conlang Lexicon

June 2025

- Explored genetic, evolutionary, and neural algorithms to generate and simulate linguistic evolution
- Published on [Wolfram Community](#)
- Invited to speak at [Wolfram Technology Conference 2025](#)

Characterizing Percussive Damage in Fossil Wood

Sept. 2023 – June 2025

- Applied VGG16/19, ResNets & Haralick texture features to identify and classify damage on fossil wood samples caused by primate tools
- Linked results to archaeology, bridging primatology with computational analysis
- Co-authored primatology/archaeology study under professor mentorship

PROJECTS

SignSensei | Python, Mediapipe, Tensorflow, OpenCV, Streamlit | github.com/SignSensei

2023

- Developed a web application to gamify learning American Sign Language (ASL)
- Built and trained a custom Tensorflow ML model for hand pose detection and classification
- Awarded the Wolfram Award at PennApps 2023 (Top 20 projects)

Sen.deX | Python, Electron, Pytorch, Transformers, Flask, Supabase | github.com/sen_dex

2025

- Built a full-stack application to predict trends in research
- Implemented innovative embedding analysis, inverse embedding, and clustering algorithms
- Awarded the Best Educational Hack at PennApps 2025

WORK EXPERIENCE

Sync Labs

Software Engineering/AI Intern

University of Pennsylvania

June. 2024 – Sept. 2024

- Led development of facial and action recognition models (FaceNetV2, MoViNet) to provide personalized health information (exercise, diet, nutritional intake) for residents in senior homes
- Fine-tuned and deployed CV models and LLMs on Raspberry Pi IoT devices

AWARDS & HONORS

1st Place Grand Award – International Science and Engineering Fair <i>Computational Biology</i>	<i>May 2025</i>
1st Place – New Jersey Academy of Science <i>Health & Medicine</i>	<i>May 2025</i>
ISEF Grand Prize – Terra North Jersey STEM Fair <i>Bioinformatics</i>	<i>March 2025</i>
• Placed top 6 out of 200+ projects • 1st Place Bioinformatics Award (2025) • Regeneron Biomedical Science Award • Karen Kranz Memorial Award	
Semifinalist & Honorable Mention – USA Biology Olympiad <i>Top 5-10% nationally</i>	<i>2023, 2024</i>
Gold – British Biology Olympiad <i>Top 5% internationally</i>	<i>2024</i>
Finalist – American Computer Science League <i>Top 5%-10% nationally</i>	<i>2023</i>
First Tech Challenge Robotics <i>Team #8405 & #23650</i>	<i>2023</i>
• Inspire Award (2025) • Control Award (2024) • Innovate Award (2023)	

TECHNICAL SKILLS

Languages: Python, Java, C/C++, SQL (Postgres), JavaScript, Wolfram Mathematica, Shell Scripting
Technologies: Linux, Pytorch, Tensorflow, Next.JS, Firebase, Supabase, Flutter
AI/ML: Deep Learning (CNNs, LSTMs, Transformers), Time-Series Analysis, Audio Processing, Computer Vision, NLP
Skills: Data Science, Computational Modeling, Full-stack Web Development, Autonomous Robotics, System Administration

LEADERSHIP & VOLUNTEERING

Conlang Club <i>Founder & President</i>	<i>2023 – Present</i>
• Founded club to explore constructed languages (Quenya, Klingon, Dothraki, etc.) and applied linguistics • Grew membership from 10 to 40+ in two years • Co-founded <i>Verborum</i>, the first high school-only linguistics magazine; recruited submissions from 4+ countries and personally edited 10+ articles out of 60+ collected	
HackMHS VIII, IX, X, XI <i>Co-organizer</i>	<i>2023 – Present</i>
• Organized NJ's largest high school hackathon (100+ participants annually) • Built hackmhs.com, secured sponsors, acquired Bambu 3D printers, ran workshops and technical talks • Fostered an inclusive hackathon community, leading logistics and outreach	
Teaching Assistant <i>USA Biolympiad Prep</i>	<i>2024 – 2025</i>
• Mentored high school biology students through weekly lectures, office hours, and custom practice exams • 13/60 students taught advanced to USABO Semifinals	
Wolfram Student Ambassador	<i>2024 – 2025</i>
• Mentored OneHacks V hackathon (200+ participants) • Answered questions virtually, gave technical talks and workshops on data science and the Wolfram Language	
Scratch Instructor <i>Millburn Institute of Talent</i>	<i>2022 – 2023</i>
• Designed and taught Scratch CS curricula to elementary/middle schoolers • Boosted program revenue by \$4k+	
Robotics Summer Coach <i>West Caldwell Tech</i>	<i>2023</i>
• Taught robotics and CS to 100+ underserved middle schoolers in 3-week summer camp	