

SONNY CHEN

+1-571-752-3683 | chen5021@purdue.edu | chensonny46@gmail.com

[in www.linkedin.com/in/chenhsonny](https://www.linkedin.com/in/chenhsonny) | www.github.com/TheXDShrimp

Fairfax, Virginia - 22033, USA




OBJECTIVE

A highly motivated and detail-oriented Computer Engineering student with strong expertise in software development, data science, and machine learning. Proven ability to apply innovative solutions to complex problems through hands-on experience in research, project development, and competitive programming. Seeking opportunities to contribute to impactful projects and further enhance technical skills in a dynamic environment.

EXPERIENCE

- **Emerging Diagnostic and Investigative Technologies** 06/24 - 08/24
Student Researcher Dartmouth University
 - Utilized CNNs in segmenting cancerous cells from histopathological images.
 - Implemented LLM Loss to improve data interpretation and model performance by 5.3%.
 - Created streamlined pipeline for data preprocessing and model training.
- **USA Computing Olympiad** 2021-2024
Gold Competitor
 - National contest focused on algorithmic problem-solving.
 - Ranging from trivial algorithms to tricky segmentation trees and dynamic programming.
 - Top 2% of all participants, demonstrating proficiency in competitive programming.

PROJECTS

- **Drone Tracking Elephant Migration Patterns** 08/23 - 05/24
Team Lead 
 - Applied object detection on a drone video stream through multithreading.
 - Implemented autonomous tracking and following of moving herds of objects (elephants).
 - Rewrote and repaired drone control software for functionality and performance.
 - Created a real-time web interface for user interaction.
- **SPRING Institute Website** 05/22 - 09/23
Senior VP of Technology 
 - Created website for a non-profit organization focused on bringing youth voices to politics.
 - Added feature for users to email local representatives through our email
 - Implemented BERT model to filter and approve user submissions.
 - Utilized AWS to host the website and PostGre SQL for database management.
- **Verbatim** 02/21 - Now
Co-founder 
 - Uses OpenAI Whisper and Google Cloud to transcribe, translate, and summarize videos.
 - Matches processed audio with deep-learning lip movements using Sync.so.
 - Powered by TwelveLabs, enabling users to query videos with context-aware responses.
 - Deployed on Vercel with MongoDB and Auth0; currently working on more features.

SKILLS

- **Programming Languages:** Python, Java, Kotlin, C++, C#, Javascript, Typescript, R, HTML, CSS, Next.js
- **Data Science & Machine Learning:** Matlab, TensorFlow, Scikit-learn, YOLO, OpenCV
- **Other Tools & Technologies:** Fusion360, ROS, MatLab, AutoCAD, LaTeX, Figma

EDUCATION

- **Purdue University - Freshman (Senior standing)** 08/2024 - Now
Major: Computer Engineering West Lafayette, Indiana
 - GPA: 4.0/4.0
- **Thomas Jefferson High School for Science and Technology** 08/2020 - 05/2024
Secondary Education Fairfax, USA
 - GPA: 4.37/4.0