# **Chinmay Govind**

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## EDUCATION

University of Pennsylvania, School of Engineering and Applied Sciences

Aug. 2024 – May 2028

B.S.E in Artificial Intelligence & Computer Engineering — GPA: 4.0

Philadelphia, PA

 Relevant Coursework: AI Lab, Computer Architecture, Linear Algebra, Calculus III, Discrete Math, Data Structures, Signal Processing

## Cumberland Valley High School

Aug. 2020 – June 2024

GPA: 4.0 — SAT: 1600

Mechanicsburg, PA

- Relevant Coursework: Multivariable Calculus, Independent Cybersecurity Study, Digital Electronics
- Honors: National Merit Finalist, William R. Pierce CS Award, PA TSA Cybersecurity 1st Place

#### EXPERIENCE

## Penn Whales Research Group

May 2025 - Present

Research Assistant

Philadelphia, PA

- Conducting deep learning research using PyTorch and CNNs to classify whale calls from large acoustic datasets.
- Developed cloud pipeline to generate synthetic whale calls and wrote CUDA optimized code for training models.

#### Penn Electric Racing (Formula SAE)

Sept. 2024 – Present

Philadelphia, PA

Electrical Software Developer

- Developed embedded firmware in C++/Rust for electric racecar.
- Integrated live telemetry with a Rust-based analytics server.

#### Penn CS Department Course Staff

Dec. 2024 - Present

Teaching Assistant - CIS 1600 (Discrete Math)

Philadelphia, PA

- Led weekly guided sessions for students in combinatorics, probability, logic, and graph theory.
- Developed custom question software which dynamically generates questions from templates, used by 100+ students

#### Science Olympiad

Aug. 2019 – Present

President, Developer, Organizer

Mechanicsburg & Philadelphia, PA

- Led a 100+ member team, won 125 medals, and organized 3 large-scale tournaments.
- Built practice tools for Astronomy and Codebusters events, improving team performance by 30%.

## Projects

## **Vehicle Telemetry Server** | Rust, Python, Embedded C++, WebSockets

Dec. 2024

Built cloud-enabled server for real-time telemetry and metadata querying.

## ${\bf QuickCal~Chrome~Add\text{-}On} \mid \textit{JavaScript},~\textit{Web3},~\textit{Gemini~API}$

Dec. 2024

Built Chrome extension using LLMs to parse and add calendar events.

#### **AstroGPT** | Python, Flask, OpenCV, Selenium

Feb. 2024 – Apr. 2024

- Built tool to catalog 5,000+ astronomy images for Science Olympiad.

#### Robot Odometry Software | C++, Arduino

Dec. 2023 – Apr. 2024

- Won PA 2nd prize by designing robot localization system.

## Robot Vision System (FTC) | Java, OpenCV, TensorFlow

Dec. 2021 – Apr. 2022

- Designed robot vision for obstacle detection; won PA Software Control Award.

#### Technical Skills

Languages: Java, Python, Web3, C, C++, Rust, PHP, SQL, .NET, LATEX, OCaml

Frameworks/Tools: Git, Spring Boot, Flask, Django, React, Selenium, Postman, GDB, Ghidra, Arduino

Libraries/Platforms: Linux, PyTorch, OpenCV, TensorFlow, AWS, Google Cloud, BigQuery

Interests: Machine Learning, Cryptography, Cybersecurity, NLP, Computer Vision

Certifications: IBM Web Dev, IBM Cloud, Google IT Support, AP French