COLE GILBERT

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EDUCATION

Cornell University, College of Engineering **Ithaca, NY**
Major: B.S. Computer Science Expected May 2025
Minors: Electrical and Computer Engineering, Business
Dean's List recipient, **GPA: 3.5 / 4.0**

- **Relevant Coursework:** Machine Learning, Artificial Intelligence, Discrete Structures, Introduction to Probability and Inference for Random Signals, Object Oriented Programming and Data Structures
- **Cornell Clubs and Organizations:** Engineers for a Sustainable World, Cornell Tech Consulting, Phi Sigma Kappa Fraternity, Association for Computer Science Undergraduates

RELEVANT EXPERIENCE

Bio-Inspired Fluids Lab **Ithaca, NY**
Research Assistant (Machine Learning) 2024

- Developed and tuned ML model to detect condensation droplets for a NSF funded project (95% accuracy rate) and tracked the droplets throughout the duration of the trial to determine their growth (Python).
- Applied 3D imaging and segmentation ML models (GARField, Polycam) to plant growth research, enabling the extraction of highly detailed and granular data to support the research objectives.

Ventegra **Remote**
Software Engineering Intern 2022

- Analyzed the code coverage of primary processes and structures of Ventegra's software via PowerShell.
- Improved testing coverage by a total of 17% across Ventegra's codebase and fixed relevant bugs.

Personal Projects
C, Python, OCaml, Java 2019 - Present

- Created several programming projects such as a Sound Localizing Camera (Python), a Multiplayer Poker game (OCaml), and a 3D Tic-Tac-Toe AI (Java). More details and projects can be found on my GitHub.

LEADERSHIP EXPERIENCE

Engineers for a Sustainable World (ESW) **Ithaca, NY**
Undergraduate Research Lead - Hydroponics 2022 - 2024

- Led a team of 5 undergraduates and collaborated to conduct research with a scalable hydroponics system to analyze the impact of wind speed on plant growth by simulating wind with an array of fans.
- Automated data collection with cameras and Raspberry Pi via image processing techniques (Python).

Division Lead - Renewable Energy Solutions 2023 - Present

- Supervised 4+ sub-teams and 20+ members to ensure that deliverables were completed on time and ensured that projects made consistent progress towards making our local community more sustainable.
- Planned team-wide events and deliverables for ESW's 60+ members at weekly Executive Board meetings.

Phi Sigma Kappa Fraternity **Ithaca, NY**
President 2023 - 2024

- Established directives for 70+ members and coordinated the organization's ops and budget (~$200,000).

SKILLS / INTERESTS

Skills: Java, Python, C, C++, OpenCV, JavaScript, OCaml, Swift, Excel, SQL, Git, PowerShell, Docker, CPR
Interests/Hobbies: running, sustainability, fishing, scuba diving, astronomy, golf, chess, NBA, NFL, poker