

# CHARLIE THARAS

Class of 2027, Williams College

Computer Science & Math, Concentration in Cognitive Science (Expected)

Email for phone #

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github.com/charlietharas

English (primary)

German (professional working)

Spanish (limited working)

## ABOUT ME

Rising sophomore at Williams College (3.86 GPA) seeking interdisciplinary summer internships and research opportunities in data science. Particularly interested in sociological and urban research with an emphasis on the interdisciplinary study of urban dynamics through machine learning models, NLP-driven language analysis, critical theory, and human geography.

Relevant coursework: Computer Organization, Data Structures & Advanced Programming, Discrete Math, Multivariate Calculus, Cities Suburbs & Rural Places, Intro to Cognitive Science, Cognitive Psychology

### Experience With

Python  
Java  
C/C++  
Go  
React.js

GNU Octave  
PostgreSQL  
Git  
Docker  
Anaconda/Pip

TensorFlow  
PyTorch  
Pandas  
Matplotlib  
OpenCV

### Certificates

Coursera (Stanford, DeepLearning.AI)

- Machine Learning
- Neural Networks and Deep Learning
- Improving Deep Neural Networks
- Structuring Machine Learning Projects

## WORK AND VOLUNTEER EXPERIENCE



### Transportation Researcher, Williams Center for Learning in Action

June 2024 - Present

Contribute to ground-up full stack development of ride-matching web application under mentorship of a transportation demand management coordinator. Work with student team to develop ride-matching algorithm, user interface, backend database, and REST API. Conduct research into microtransit solutions in rural areas such as the Berkshires.



### Student Developer, Williams Students Online

January 2024 - Present

Work with student mentors on front and back end of Williams College student website (wso.williams.edu). Utilize Go and GORM library to implement account synchronization and feature flags for course catalog and scheduler.



### Data Engineering and Bioinformatics Intern, Memorial Sloan Kettering MIND

June 2022 - August 2022

Contributed to Luna (github.com/msk-mind/luna) open source histology and cancer detection software. Worked with a team of data engineers at MSK MIND on training unsupervised learning models for cancer cell detection. Developed lightweight .svs viewer and annotator for pathologists to aid in model training pipeline.



### Various Roles, Steel City Codes

November 2020 - August 2023

Starting as a volunteer tutor, took on increasing responsibilities until Nov 2021-Aug 2023 tenure on executive board. Led operations for 2K+ annual students nationwide, oversaw organizational partnerships, conducted volunteer interviews, organized international hackathons (\$15K+ in sponsorships/donations, "Steel City Hacks" on Devpost), contacted school administrators, personally developed equitable STEM curricula, and oversaw regional recruiting, staffing, and expansion.

## CLUBS AND ORGANIZATIONS

### Member, Williams Undergraduate Research Journal

Discuss scientific papers and possible research areas with peers, 2023-

### President, Computer Science Consortium

Planned & taught high school computer science lessons, 2021-2023

### Teaching Intern, Science Research Seminar & CS9

Developed curricula, assisted with class, gave lessons, graded homework, 2022-2023

### Writer, BITS Magazine

Wrote articles for high school's annual computer science magazine, 2021-2023

## HONORS AND AWARDS

### Spring 2024 Class of '60s Scholar

Awarded to high-achieving and passionate computer science students.

### 2024 Ward Prize Nominee

For creating a compelling student project (CitySim, CSCI 136).

### 2023 High School Comp. Sci. Award

Awarded to exemplary computer science students.

### 2023 Sheila Glickstein Hackner Award

For dedication in the service of education for others, 600+ service hours.