# Yuhan Wang

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# **EDUCATION**

**Smith College** 

Northampton, MA

Expected May 2025

• Major: Art History, Computer Science, GPA: 3.96/4.0

August 2023

**Cornell University**, online certificate in Machine Learning Foundation

# **SKILLS**

Programming: Python, Java, C, C++, JavaScript, Ruby; Framework: Angular, Rails; ML: NumPy, Pandas,

scikit-learn

Creative Software: Adobe PhotoShop, Premiere; Blender, Figma, Fusion 360, Shapr3D, Tinkercad

Language: Chinese (native speaker); English (fluent); Spanish(intermediate)

# **EXPERIENCE**

# **Smith College Phyllotaxis Lab**

Northampton, MA

Research Assistant in Prof. Christophe Golé's Phyllotaxis lab

May 2023 – present

- Applied 3 variations of Topological Data Analysis in Python to measure the regularity of phyllotaxis from a disk-stacking model and 10+ plant species
- Redesigned model algorithm to generate hexagonal heatmaps; generated animated persistence diagrams to visually differentiate geometric features across species

# **Smith College Design Thinking Initiative**

Northampton, MA

Studio Design Partner; Website Operation Partner

May 2022 – present

- Updated interface for an interactive map on the self-hosted website <u>smithmakersmaps.com</u> for students to access live information about creation resources on campus with Typescript and Angular
- Tutor students on design software and machines like 3D printers to encourage computational designs

#### **PROJECTS**

Biointerphase

Boston, MA

AI Studio Project

August 2023 - December 2023

- Collaborated with a team of 5 to develop a time series analysis model to predict bat population decline from White-Nose Syndrome across North America
- Leveraged Scikit-learn and built 2 ML models to comprehensively analyze data in 2 tracks; extract insights for effective protection actions for bats and provide foundation for future research on this disease

# **ExploreCSR** at Google Research

Online; Providence, RI

Research Fellow at Brown University

January 2023 - May 2023

- Researched and prototyped 10+ vector images as web page backgrounds in HTML with <svg> tags; conducted user study on a vector creation tool *filtered.ink* about learning cost for Prof. Jeff Huang's research lab
- Programmed an animated poster in SVG to showcase vector images' flexibility and presented at Brown's CS Research Symposium

Valet Bike

Northampton, MA

CSC223 Intro to Software Engineering

February 2022 - May 2022

- Teamed with 4 students building a semester-long project on a Bike Rental Website with Ruby on Rails; applied MVC design pattern, iStar model, and Agile practices to maintain sustainable project development
- Incorporated human-centered design by adding features like adjustable windows for mobile-friendly view; applied Google Map API and Stripe that enables real-world rental experience

# LEADERSHIP & COMMUNITY ENGAGEMENT / CREATIONS

Education Without Barriers: Website team member

September 2023 – present

**International Students Organization:** Co-Chair(23'); Publicity Chair(21'-22')

September 2021 - present