

EDUCATION

• The University of Rochester

2024-2028/9

PhD in Computer Science

GPA: 4.0

• Dartmouth College

2020-2024

B.A. in Computer Science and Economics

GPA: 3.5

Honors and Awards

• NSF Research Stipend International Research Experience for Students IRES Program

2023

• New York Andrew S. Macdowell Jr. 1944 Scholarship Fund Dartmouth Club of Rochester

2020-2024

RESEARCH EXPERIENCE

• The University of Rochester

 $September\ 2023$ - Present

Rochester, NY U.S.A

PhD Research in Computer Science

- Working on developing a framework to assess fairness in the virtual democracy setting.
- Topics: Algorithmic game theory, computational social choice, fairness, machine learning, algorithms

• Dartmouth College

September 2023 - June 2024

Thesis Research: The airplane problem

Hanover, NH U.S.A

- Published a year-long thesis advised by Professor Hsien-Chih Chang on matching passengers to airplane seats
- Topics: Nash Social Welfare, matching algorithms, linear programming

National Science Foundation

June - August 2023

 $Research\ Fellow$

Tokyo, Japan

- Conducted a project on virtual makeup try-on. Submitted and presented an accepted Technical Communication to SIGGRAPH Asia.
- Topics: Computer graphics, neural networks, cosmetic rendering, makeup transfer, machine learning.

PUBLICATIONS

• Papers in Conference Proceedings

December 2023

ACM Siggraph Asia 2023 (Accepted, Technical Communications)

- Publication Title: MicroGlam: Microscopic Skin Image Dataset with Cosmetics
- Authors: Toby Chong, Alina Chadwick, I-Chao Shen, Haoran Xie, Takeo Igarashi

• Talks 2023-2024

 $Single\mbox{-}speaker\ Presentations$

- International Symposium on Intelligence Design (March 2024)
- SIGGRAPH Asia (December 2023)
- JAIST IRES Physical AI Design Workshop (August 2023)

WORK EXPERIENCE

DUST Identity

September - December 2022

Software Engineer Intern

Boston, MA U.S.A

Remote

- Created an internal web app that serves as an admin portal, allowing DUST's customer success team to monitor customer account health and view data that indicate how each customer is using the product.
- Frontend written in React-Admin and Javascript; Backend utilizes FastAPI and was written in Python

• IBM June - August 2022

Accelerate, Software Track

- Virtually worked on frontend website development projects in HTML/CSS, JavaScript, and React
- Participated in workshops on backend development and security

TEACHING EXPERIENCE

• Dartmouth College, Computer Science Department

Teaching Assistant

January 2021 - Present Hanover, NH U.S.A

- Course: Introduction to Programming and Computation (COSC 01). Instructors: Vasanta Lakshmi-Kommimeni and Andrew Campbell
- Course: Discrete Mathematics in Computer Science (COSC 30). Instructor: Hsien-Chih Chang
- Course: Full-Stack Web Development (COSC 52). Instructor: Timothy Tregubov
- Course: Machine Learning and Statistical Analysis (COSC 74). Instructors: Soroush Vosoughi and Yujun Yan

• Dartmouth College, Russian Department

January 2021 - Present

Apprentice Teacher

Hanover, NH U.S.A

– Course: Introduction to Russian Language and Culture (RUS 01, RUS 02, RUS 03). Instructors: Alfia Rakova, Valentina Apresyan, Tatiana Filimonova

SKILLS AND RESEARCH INTERESTS

Areas of Interest: Game Theory, Algorithmic Economics, Computer Graphics, Human-Computer Interaction

Spoken Languages: English, Russian. Intermediate Spanish

Programming Languages: Python, Javascript, React, HTML/CSS, Java, C, GLSL

Coursework: (Graduate) Advanced Algorithms, Artificial Intelligence, PhD Research, Problem-Solving Seminar, (Undergraduate) International Finance, Monetary Policy and the Macroeconomy, International Trade, Econometrics, Network Science and Complex Systems, Macroeconomics, Microeconomics, Full-Stack Web Development, Computer Graphics, Algorithms, Machine Learning, Discrete Mathematics in Computer Science, Differential Equations, Software Design and Implementation, Problem Solving via Object-Oriented Programming, Multivariable Calculus.

Other Positions of Responsibility

• President Women in Computer Science, Dartmouth College	2022-2024
• Violinist Individual Study Program under Omar Chen Guey at Dartmouth College	2022-2024
• Volunteer David's House through Kappa Kappa Gamma	2021-2024