Daisuke Yamada

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GitHub: github.com/Daisuke0713

EDUCATION

University of Wisconsin - Madison　　Madison, WI
Traditional PhD in Computer Science　　Expected Graduation June 2028

Carleton College　　Northfield, MN
Bachelor of Arts: Mathematics (Honors) and Computer Science (Honors)　　June 2023
GPA: 3.95/4.00

DIS Study Abroad in Scandinavia　　Copenhagen, Denmark
Semester Abroad in Machine Learning　　January to May 2023
GPA: 4.00/4.00

Budapest Semesters in Mathematics　　Budapest, Hungary
Semester Abroad in Mathematics and Computer Science　　August to December 2021
GPA: 4.00/4.00

PUBLICATION

- Composing Linear Layers from Irreducibles
  Travis Pence, **Daisuke Yamada**, Vikas Singh
  Accepted at NeurIPS 2025

- Is Conformal Factuality Robust to Distractors?
  Daisuke Yamada, Reid Chen, Harit Vishwakarma, Ramya Korlakai Vinayak
  Under Review, EMNLP 2025

- Adaptive Scoring and Thresholding with Human Feedback for Robust Out-of-Distribution Detection
  Daisuke Yamada, Harit Vishwakarma, Ramya Korlakai Vinayak
  Under Review, TMLR 2025

- Selecting Balls From Urns With Partial Replacement Rules
  Julian Burden, Chandramauli Chakraborty, Qizhou Fang, Lisa Lin, Nasser Malibari, Sammi Matoush,
  Isaiah Milbank, Zahan Parekh, Martín Prado, Rachael Ren, Qizhao Rong, Maximiliano Sánchez Garza,
  Eli Sun, Enrique Treviño, **Daisuke Yamada**
  PUMP Journal of Undergraduate Research, 2024

EXPERIENCE

Senior Research advised by Professor Anna Rafferty　　Northfield, MN
Carleton College　　Fall 2022

- Replicated Image-Adaptive Generative Adversarial Networks in the task of image reconstruction
- Built generative models capable of accurately estimating compressed or degraded images with high confidence
- Analyzed results and proposed new optimization methodologies to reduce run-time
- Tested models against images of different facial features to identify biases in our models

MIAC Analytics Summer Intern　　New York City, NY
MIAC Analytics　　Summer 2022

- Worked as a Machine Learning Software Engineer within the Development Group
- Documented and improved a pipeline and template builder of automation software, AiCR, that utilized deep-learning LSTM networks to extract relevant data points from documents
- Developed new functionalities within the software

MIAC Analytics Winter Intern New York City, NY
MIAC Analytics Winter 2021

- Collaborated with a senior software engineer to implement a program recognizing handwritten characters and text boxes using multiple deep learning models in Python
- Delivered a presentation on the project to other work units at the end of the internship program

Polymath Jr. REU Research Remote
Polymath Jr. REU Summer 2021

- Collaborated in a team of 13 to investigate the "preferential" distribution $X(0,1)$ in Combinatorial Probability
- Explored some open questions regarding the distribution X such as the density, expectation, and variance

TEACHING

- **Teaching Assistant** at UW Madison 2025
  Numerical Linear Algebra (CS 513)
- **Teaching Assistant** at UW Madison 2023, 2024
  Discrete Mathematics (CS 240)
- **Head Teaching Assistant** at UW Madison 2024
  Data Programming I (CS320)
- **Quantitative Resource Center (QRC) Tutor** at Carleton College 2022
  Mathematics and Statistics Courses (MATH/STATS 100 $\sim$ 200)
- **Teaching Assistant and Grader** at Carleton College 2022
  Multivariable Calculus (MATH 201)

RELATED SKILLS

- **Languages:** Python, C, C++, C#, Java, Scheme, HTML, JavaScript, SQL, CSS, Go
- **Software:** Latex, R, Octave, Matlab, MySQL, Excel, Eclipse, VS Code, Visual Studio, GitHub, Bitbucket, Jira

SCHOLARSHIPS AND AWARDS

- Distinction on Senior Thesis in Computer Science at Carleton College 2022
- Distinction on Senior Thesis in Mathematics at Carleton College 2022
- Patricia V.Damon Scholarship 2022 2022
- Dean's List 2021-2022 at Carleton College 2021–2022
- Dean's List 2020-2021 at Carleton College 2020–2021