

# Max Wolff

[mswolff@wesleyan.edu](mailto:mswolff@wesleyan.edu) | [linkedin.com/in/max-wolff-6a3894228](https://www.linkedin.com/in/max-wolff-6a3894228) | [mwolff31.github.io](https://github.com/mwolff31)

## EDUCATION

---

### Wesleyan University

*BA, Physics*

Middletown, CT, USA

2021 – 2025 (expected)

## EXPERIENCE

---

### Research Intern

*Max Planck Institute for Intelligent Systems*

- Basic machine learning research in Wieland Brendel's group.

May 2022 – Present

*Tübingen, Germany*

### Research

*Wolff Household*

- Did basic machine learning research with my father, and we published two papers together. One was on the security of neural text detectors and was accepted to a workshop at ICLR 2020; the other was on gaining a better understanding of feature preference in CNNs and was accepted to SVRHM 2021.

January 2020 – May 2021

*Los Angeles, CA, USA*

### Volunteer/Engineer

*AI4K12*

- Built a web-based educational demonstration of facial detection using TinyYOLOv2. This was done under the supervision of David Touretzky at Carnegie Mellon.

August 2020 – April 2021

*Remote*

### Research Intern

*Carnegie Mellon University*

- Worked remotely with Mahmood Sharif on improving the security of facial recognition algorithms.

July 2019 – November 2019

*Remote*

### Research Intern

*University of Illinois at Urbana-Champaign*

- Worked with Professor Christopher Fletcher on using capsule networks for unsupervised learning and generative modeling.

June 2018 – August 2018

*Urbana, IL, USA*

## PUBLICATIONS

---

### The Independent Compositional Subspace Hypothesis for the Structure of CLIP's Last Layer

Max Wolff, Wieland Brendel, Stuart Wolff

*Me-FoMo @ ICLR 2023*

### Signal Strength and Noise Drive Feature Preference in CNN Image Classifiers

Max Wolff\*, Stuart Wolff\*

*SVRHM @ NeurIPS 2021*

### Attacking Neural Next Detectors

Max Wolff, Stuart Wolff

*Trustworthy Machine Learning @ ICLR 2020*

## TECHNICAL SKILLS

---

**Programming Languages:** Python

**Frameworks:** PyTorch, TensorFlow

**Languages:** English, German (in progress)