

# Alex Trevithick

Email: amt6@williams.edu

Website: alextrevithick.github.io

## Education

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**Williams College**, Williamstown, MA

May 2021

Bachelor of Arts, Computer Science and Mathematics; GPA: 3.92

*Awards:* Wilmers Fellowship, John Houghton Harris Memorial Scholarship, 2018 ASIP Grant

**University of Oxford**, Oxford, UK

October 2019 – June 2020

Visiting Student in Williams Exeter Programme at Oxford; GPA: 4.0

*Courses:* Theories of Deep Learning, 3D Comp Vis., Complex Analysis, Machine Learning, Artificial Intelligence

**The Hotchkiss School**, Lakeville, CT

June 2017

*Honors:* Cum Laude

## Publications

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GRF: Learning a General Radiance Field for 3D Scene Representation and Rendering

**Alex Trevithick**, Bo Yang

arXiv preprint 2020

## Technical Skills

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Python(TensorFlow), Java

## Research Interests

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Generalization in 3D Reconstruction, Neural Scene Representation, Theories of Deep Learning

## Research Experience

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**Wilmers Fellow** – University of Oxford

May 2020 – August 2020

- Researched generalization in neural scene representations with Bo Yang
- Extended radiance field approaches to predict novel scene representations in a single forward pass

**NSF REU in Wearable Computing** – Washington State University

May 2019 – August 2019

- Researched brain-computer interaction in the lab of Mona Ghandi
- Implemented ensemble model with input from multiple modalities to classify emotional states in real time

## Teaching Experience

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**Teaching Assistant in Measure Theory and Hilbert Spaces** – Williams College Sep – Dec 2020

- Hold seven precepts per week for groups of students to review graded course material

**Teaching Assistant in Introduction to Computer Science** – Williams College Feb – May 2019

- Administer Python programming lab help for seven hours per week and grade student labs

**Teaching Assistant in Computational Linear Algebra** – Williams College Sept – Dec 2018

- Grade problem sets in R and hold weekly help session

## Industry Experience

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**Data Analyst Intern** – Haystack Search, Brooklyn, NY June - Aug 2018

- Work at high-growth start-up providing a hyperlocal product search platform across the country
- Clean and analyze data with PostgreSQL for predictive analytics

## References

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- Dr. Bo Yang, Assistant Professor at The Hong Kong Polytechnic University, [bo.yang@cs.ox.ac.uk](mailto:bo.yang@cs.ox.ac.uk)
- Dr. Cesar Silva, Hagey Family Professor of Mathematics at Williams College, [csilva@williams.edu](mailto:csilva@williams.edu)
- Dr. Leo Goldmakher, Assistant Professor at Williams College, [leo.goldmakher@williams.edu](mailto:leo.goldmakher@williams.edu)