

Oliver Adams

Portfolio: oliver-adams-b.github.io

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Summary

Computer science graduate student from Maine with 5+ years of professional experience in data science, research, computer vision, AI and statistics, and a strong academic background in Math, Physics, and engineering. Eager to be a part of a motivated team of curious and excited engineers.

Education

Northeastern University, Roux Institute	PORTLAND, MAINE
Masters Degree in Computer Science	2021 – Present
University of Maine, Orono	ORONO, MAINE
Bachelors of Arts in Physics, Double Major in Mathematics	2015 – 2019
<i>Sigma Pi Sigma (Physics Honors), Mu Alpha Theta (Math Honors), magna cum laude</i>	
American University of Bulgaria	BLAGOEVGRAD, BULGARIA
Semester Abroad Study in Mathematics	Fall 2017
Maine School of Science and Mathematics	LIMESTONE, MAINE
High School Diploma	2013-2015

Experience

Ushur	REMOTE; PORTLAND, MAINE
Data Science Intern	Jan' 2021 – Aug' 2021
<ul style="list-style-type: none">Designed and implemented computer vision models for efficiently processing insurance documents in an unsupervised manner using python.Coordinated with a global team of engineers to improve accuracy of Ushur's data processing pipeline.Deployed my custom models onto a API hosted on GCP for use globally.	
Earth Species Project	REMOTE; PORTLAND, MAINE
Volunteer Open Source Collaborator	Aug' 2020 – Dec' 2020
<ul style="list-style-type: none">Adapted research-grade language and vision models to translate Egyptian fruit bat noises into English using fastai/pytorch on GCP's AI Platform.Created a custom model architecture which greatly outperformed on benchmark classification tasks.Collaborated with a global team of open source developers and researchers.	
Sylebra Capital	Wan Chai, Hong Kong
Data Scientist and Quantitative Fundamental Researcher	Aug' 2019 – Feb' 2020
<ul style="list-style-type: none">Performed research and analysis under the direction of the funds' lead investor.Implemented models which thinned the investible universe, allowing for a more efficient selection of potential portfolio candidates.Webscrapped terabytes of historical metrics for a large universe of stocks, and maintained a custom SQL database.	
Muuse, formerly revolv	Bali, Indonesia & Hong Kong
Chief Technology Officer	Nov' 2018 – June 2019
<ul style="list-style-type: none">Designed and managed the production of the beta version for a technological ecosystem which facilitated the circular reuse of cups, circumventing the need for single use waste.Winner of the OpenIDEO NextGen Cup Challenge, secured partnership with McDonalds and Starbucks.	
Frontier Institute for Research in Sensor Technologies	Orono, Maine
Undergraduate Research Fellow	Summer 2018
<ul style="list-style-type: none">Conducted research on modeling particle separation in a fixed volume filled with fluid using surface acoustic waves.This work focuses on the analysis of the fluid dynamics and multiphysics phenomena inside a sessile droplet, which may contain particles from diverse sizes, shapes, and/or densities, as excited by an array of surface acoustic wave devices	
Undergraduate Research Fellow	Summer 2017
<ul style="list-style-type: none">An Investigation on flow-driven microfluidic mixers for the production of silver nanoparticlesVia in-situ testing and computational modeling, I advanced the design of a microfluidic mixer for the purposes of producing monodisperse nanoparticles	

Data Analyst

Feb' 2017 – May 2017

- Analyzed data from a 52m composite windblade fatigue test using MATLAB

Instrumentation Technician

Summer 2016

- Assembled DAQ systems and instrumentation for active research projects
- Conducted verification and maintenance of instrumentation

ASAP Media Services

University of Maine, Orono

Computational Media Designer

Sep' 2016 – May 2017

- Developed visual art and explored interactive coding as a medium through which users can learn and play.
- Assisted with the realization of a capstone project on creating educational infographics using gestural hand interactions using Processing.
- Developed a webapp in CSS and P5.js to visually train and verify volunteers on measuring water turbidity; to act as a platform that allows volunteers to better assess the health of Maine's lakes.

Please refer to my [Linkedin profile](#) for the complete list of work experiences.

Skills

Languages: Extremely comfortable and confident when developing in Python and C, and I have a solid working understanding and familiarity with the following languages: Java, Processing, P5.js, SQL, Bash (linux), MATLAB, Golang.

Frameworks/Libraries: Well versed with fastai/pytorch, tensorflow, numpy, pandas, cython

Digital Environments: Extremely comfortable with Linux (Ubuntu) from years of daily use. Have developed and worked on applications, research projects, and APIs hosted on GCP and AWS. Extremely comfortable with GCP's AI Platform. Familiar with working with AWS EC2 instances. Mostly develop in VIM/tmux, Jupyter Notebooks, Spyder, or VSCode.

Areas of Expertise: *please refer to my portfolio linked above for a more full enumeration.* Large scale statistical research, data acquisition, webscraping, exploratory data analysis, computer vision, convolutional techniques, abstract mathematics.

Relevant Courses

Transcript provided at request

Mathematics: MAT 451 Dynamical Systems, MAT 463 Abstract Algebra, STS 434 Statistics, MAT 453 PDES, MAT 425 Real Analysis, MAT 452 Complex Analysis.

Physics: PHY 454 Electricity and Magnetism, PHY 469 Quantum Physics, PHY 472 Fourier Optics, PHY 442 Modern Experimental Physics, PHY 223 Special Relativity.

Engineering: MEE 251 Strength of Materials, ECE 465 Sensors, ECE 209 Circuits.

Interests

Non-exhaustive: highlining/tightrope walking, bouldering, multi-pitch trad climbing, crocheting, skateboarding, risotto, \LaTeX , linux, topological data analysis, tenor banjo, life outside of work.