

Keltin Grimes

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EDUCATION

Carnegie Mellon University, graduating May 2023

Bachelor of Science in Statistics and Machine Learning

Additional Major in Computer Science

4.0 GPA, Fall 2019 through Spring 2022 Dietrich College **Dean's List with Honors**

Relevant Coursework:

- *Math and Statistics:* Modern Regression, Probability Theory, Statistical Inference, Advanced Data Analysis, Matrices and Linear Transformations, Statistical Graphics and Visualization
- *Computer Science:* Intro to Deep Learning (Masters), Intro to Machine Learning, Principles of Software Construction, Statistical Learning, Computer Systems, Functional Programming
- *Other:* Writing for the Professions, Rapid Prototyping

Skills: Python (PyTorch, Tensorflow) • C • Java • C++ • R • Standard ML • SQL • Web Dev. (ReactJS)

WORK/RESEARCH EXPERIENCE

Research Assistant – Materials Science Department, Carnegie Mellon, January 2021 - Present

- Exploring machine learning models to predict various properties of molecules and crystals as a part of Dr. Noa Marom's group. Set up a distributed hyperparameter-optimization scheme and trained state-of-the-art models using PyTorch and Tensorflow.

Software Development Intern – Amazon, May-August 2022

- Designed and implemented a suite of APIs using AWS's serverless compute platform. Automated the Alexa Shopping division's use of a system integral to Alexa's speech recognition performance.

Software Development Intern – Amazon, May-August 2021

- Developed a tool to automate the process of adapting Amazon Alexa's Automatic Speech Recognition models to new use-cases. Used audio generated from neural networks to save 3-4 weeks of calendar effort compared to the previous manual annotation system.

Research Intern – The Laboratory for Analytic Sciences, May-August 2020

- Created an application allowing users to rapidly triage a large collection of documents, with efficiency gains of over 50% compared with standard techniques. Built with PyTorch and ReactJS.
- Utilized state-of-the-art techniques in Natural Language Processing and Active Learning to enable the training of a robust text-classifier on extremely small amounts of data.

AWARDS

- **Leadership Challenge Winner**, American Statistical Association, 2019
- **Short Story Competition Honorable Mention** for *Iluula*, Raleigh Fine Arts, 2019

EXTRACURRICULAR ACTIVITIES

- **CMU Data Science Club**, member, 2019 **End-of-Semester Data Challenge Winner**
- **CMU Running Club**, **Prime Minister** and Student Pandemic Safety Ambassador
- **Ironman 70.3 Triathlon Finisher**, 2021 Ohio Ironman 70.3