KAI MALLOY

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EDUCATION

University of California, Irvine Graduation: Jun. 2021
B.S. Computer Science | AI Specialization | **GPA: 3.83/4.00** | ICS Honors | Deans List: 2017-Present
Relevant Coursework: Neural Networks and Deep Learning, Machine Learning and Data Mining, Projects in Artificial Intelligence, Algorithms for Probabilistic and Deterministic Graphical Models

RESEARCH AND PROFESSIONAL EXPERIENCE

DataLab Group at UC Irvine | PI: Prof. Padhraic Smyth, Graduate Mentor: Casey Graff Mar. 2020 - Present
Undergraduate Researcher *Irvine, CA*
- Create neural network models and visualization scripts for forecasting California wildfires using satellite data

Calit2 at UC Irvine | PI: Prof. Bill Tomlinson Jan. 2020 - Sept. 2020
Undergraduate Researcher *Irvine, CA*
- Built a ruby on rails platform for simulating patent protection

Apple Jan. 2019 - Jul. 2019
iPhone Quality Engineer Intern *Cupertino, CA*
- Wrote visualization scripts and developed two full scale applications for analyzing iPhone Failure Analysis data
- Optimized large scale data processing task that took 10 minutes using internal tools down to 5 seconds with my Python script

Givsum Mar. 2018 - Jun. 2018
Special Projects Intern *Irvine, CA*
- Implement a calendar view of volunteer events for the company website using Django

LEADERSHIP ACTIVITIES

The Green Initiative Fund Sept. 2020 - Present
Commissioner *Irvine, CA*
- Manage meetings to approve sustainable undergraduate projects that impact the UC Irvine campus

Teaching at UC Irvine Sept. 2020 - Present
Learning Assistant *Irvine, CA*
- Hold office hours and assist professor during lecture for Discrete Mathematics and Introduction to Programming

TECHNICAL SKILLS

Programming Languages	Python, Java, C, C++, R, HTML, CSS, JavaScript
Data Science Libraries	PyTorch, Keras, Scikit-Learn, NumPy, SciPy, Pandas, Matplotlib, PyQtGraph
Other	Linux, Git, Vim, Slurm, MIPS (Assembly), LaTeX

SELECTED PROJECTS

Song Classification and Recommendation with BERT: Deep Learning Course Project Mar. 2021
- Built a song classification model using BERT and a recommendation system using clustering and an inverted index

Rain Removal from Images in Minecraft: Machine Learning Course Project Dec. 2020
- Built an image-to-image deep neural network to remove/add rain to images using PyTorch

Active Wildfire Forecasting: Summer Undergraduate Research Project Aug. 2020
- Developed novel convolutional and recurrent neural networks for predicting wildfire spread using PyTorch with the UC Irvine Summer Undergraduate Research Grant (will be published)

Wine Quality Classification: Machine Learning Course Project Mar. 2020
- Built a Random Forest and Support Vector Machine classifier for a Wine Quality dataset using Scikit-Learn

OTHER

Fulbright Australia Semi-finalist (waiting on final results) | Bilingual: fluent in Japanese (spoken, written), English