Audrey Beard

630-854-9620 • audrey.s.beard@gmail.com
AudreyBeard.com • github.com/AudreyBeard

Education

MS in Computer Science at Rensselaer Polytechnic Institute in Troy, NY — Aug. 2017 - Aug. 2020

BS in Electrical Engineering at Seattle University in Seattle, WA — Sept. 2014 - June. 2017

Professional Experience

Research Assistant at Rensselaer Polytechnic Institute in Troy, NY — Jan. 2020 - Aug. 2020

- Formalized computer-assisted human annotation system for data labeling tasks
- Proposed novel metrics for human annotation effort and derived estimates using easily-computed proxies

Researcher at Rensselaer Polytechnic Institute in Troy, NY — Jan. 2020 - Aug. 2020

- Led team of eight undergrads to develop CS curriculum that incorporates feminist and critical race theory into foundational CS curriculum
- Collected and analyzed qualitative data to examine negative impacts of traditional pedagogical models on LGBTQ+, POC, and women CS students

Computer Vision Research Intern at The TRASH App in Brooklyn, NY — May 2019 - Aug. 2019

- Developed novel method for action modeling in images and videos by emulating language
- Produced semantically-significant action embeddings similarly to WordNet for retrieval and recommendation

Computer Vision Research Intern at Kitware in Clifton Park, NY — May 2018 - Aug. 2018

- Implemented deep learning algorithm using PyTorch and other open-source machine learning libraries
- Adapted the YOLO object detector to improve human annotation error in satellite images

Software Development Engineer Intern at 98point6 in Seattle, WA — June 2017 - Aug. 2017

- Learned TensorFlow, Keras, and Scikit-Learn to develop image-based skin condition diagnosis tool for small tele-health startup
- Balanced diagnostic accuracy, usability, and scalability to deliver proof-of-concept and presented work to each PM's, doctors, and executives

Research Assistant at Seattle University in Seattle, WA — Sept. 2016 - June 2017

- Built background segmentation and image classification pipeline for 94% accuracy
- Published results in the 2017 IEEE Global Conference on Signal and Information Processing

Researcher at Florida Institute of Technology in Melbourne, FL — May 2016 - July 2016

- Selected for competitive NSF REU to classify time-domain signals and developed novel feature extraction technique.
- Published in the 2017 International work-conference on Time-Series Analysis and selected for the 2017 edition of Springer's Contributions to Statistics

Skills and Qualifications

- Python (focused on DS and ML)
- C/C++
- Bash scripting
- MATLAB
- SQL
- Deep learning R&D
- Quantitative experimentation
- Qualitative analysis
- Curriculum design
- Image processing
- Project management
- Public speaking
- Open-source contribution
- Technical writing
- Team leadership

Relevant Coursework

- Computational Vision
- Machine Learning
- Parallel Computing
- Distributed Systems
- Algorithm Analysis & Design
- Digital Signal Processing
- Programming Languages
- Computer Operating Systems
- Data Structures