Audrey Beard

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Education

MS in Computer Science at Rensselaer Polytechnic Institute in Troy, NY BS in Electrical Engineering at Seattle University in Seattle, WA

Aug. 2017 - Aug. 2020

Sept. 2014 - June. 2017

Professional Experience

Research Assistant at Rensselaer Polytechnic Institute in Troy, NY

Jan. 2020 - May 2020

- Developed novel machine learning performance metrics for static and online learning
- ▶ Formalized animal ID challenge: dataset and protocol for semi-supervised open world recognition

Researcher at Rensselaer Polytechnic Institute in Troy, NY

Jan. 2020 - May 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

- $\,\,\vartriangleright\,$ 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