Audrey Beard

AudreyBeard.com
Pronouns: they/them or she/her

Professional Experience

Sr. Machine Learning Engineer at StudioLAB at Walt Disney Studios in Burbank, CA   Sep. 2021 - Present

▷ Lead technical development of ML-based pilot projects for use by creatives and operators in several stages of film production & delivery pipelines

▷ Institute various engineering best-practices for my team: automated linting, testing, containerization, etc.

▷ Diagnose & solve complex technical challenges with teammates on ML projects: performance metric development, algorithm optimization, and debugging

▷ Champion ethical development of AI systems and datasets, in line with Disney's broader D&I goals

Machine Learning Engineer at StudioLAB at Walt Disney Studios in Burbank, CA   Nov. 2020 - Sep. 2021

▷ Developed innovative and valuable neural style transfer tools for creatives working in content production and post-production pipelines

▷ Worked with diverse stakeholders such as artists, PMs, and other engineers to build maintainable tools for technical and non-technical users

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

▷ Formalized and solved the computer-assisted human annotation problem for data labeling tasks

▷ Proposed novel metrics for human annotation effort and derived estimates using easily-computed proxies

Computer Vision Research Intern at Trash (acquired by VSCO) in Brooklyn, NY   May 2019 - Aug. 2019

▷ Invented 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 PMs, 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

Research Assistant 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

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

Select Skills & Qualifications

▷ Python (advanced)

▷ C/C++ (novice)

▷ BaSH & Unix (intermediate)

▷ Deep learning R&D

▷ Computational photography

▷ Image processing

▷ Project management

▷ Technical communication

▷ AI ethics research