Nicholas Jacobs

nicholas.jacobs [at] utah [edu]
www.nick-jacobs.com

Education

B.S. Computer Science, 3.99 GPA, May 2024

University of Maine, Orono, ME

B.S. Mechanical Engineering, 3.99 GPA, May 2024

University of Maine, Orono, ME

Ph.D Computer Science, expected May 2028

University of Utah, Salt Lake City, UT

Research Experience

Improving T1p mapping by modeling T1 with Bloch equations for cardiac MRI with Dr. Edward DiBella

Sequential Transfer for Multi-Source Transfer Learning with Aayush Manandhar under Dr. Salimeh Yasaei Sekeh, 2023-2024

Image Segmentation with UNet for Additive Manufacturing under Dr. Greg Studer, 2022

Estimating Dimensionality of Latent Spaces Using Autoencoders for Anomaly Detection under Dr. Dhrubajit Chowdhury and Dr. Kris Villez, 2021

Finite Element Modeling for Additive Manufacturing Process Simulation under Joseph Kerr, 2020

Posters

Jacobs, N., Manandhar, A., Sekeh, S. Towards Sequential Transfer for Multi-Source Transfer Learning. University of Maine Student Symposium, Orono, ME, April 12, 2024. *Poster*

Employment

University of Utah, Salt Lake City, UT, July 2024-present

University of Maine Advanced Structures and Composites Center, Orono, ME, June 2017-June 2024

University of Maine Sekeh Machine Learning Lab, Orono, ME, January 2023-May 2024

Oak Ridge National Laboratory, Oak Ridge, TN, June 2021-August 2021

Awards & Honors

Nominated by Computer Science Department as candidate for University-Wide Valedictorian, January 2024

Awarded Dearborn Merit-Based scholarship, 2019-2023

Named UMaine Presidential Scholar, 2019-2024

Inducted as Member of Upsilon Pi Epsilon, International Honor Society for the Computing and Information Disciplines, 2022

Inducted as Member of Tau Beta Pi, The Engineering Honor Society, 2022

Inducted a Member of Pi Tau Beta, International Honor Society for Mechanical Engineers, 2021

Professional Development

Attended *From Machine Learning to Autonomous Intelligence with Yann LeCun* seminar at Northeastern University, May 24th 2023

Completed Deep Learning Specialization Course with Dr. Andrew Ng through Coursera, Earned Certificate of Completion, 2022

Completed Data Structures and Algorithms Nanodegree on Udacity, Earned Certificate of Completion, 2022

Completed Digital Manufacturing & Design Technology Specialization through University at Buffalo on Coursera, Earned Certificate of Completion, 2021

Leadership

President of University of Maine American Society of Mechanical Engineers (ASME) Student Chapter, September 2020 - May 2022

Technical Skills

Python, PyTorch, TensorFlow, Numpy, Scipy, Scikit-learn, SimpleITK, MongoDB, PostgreSQL, Numba, C, C++, Java, MATLAB, Matplotlib, Pandas, Git, Docker, LaTeX