

Dean Biskup

✉ dbiskup2@illinois.edu • 🌐 www.deanbiskup.com
in www.linkedin.com/in/deanbiskup • 🌐 www.github.com/dbisk

EDUCATION

University of Illinois, Urbana-Champaign

M.S. Electrical and Computer Engineering

May 2022

GPA: 3.50/4

Relevant Coursework: Computer Vision (ECE 549), Detection & Estimation Theory (ECE 561), Machine Learning for Signals (CS 545), Pattern Recognition (ECE 544NA)

University of Illinois, Urbana-Champaign

B.S. Electrical Engineering, Minor in Computer Science

May 2020

GPA: 3.77/4

Activities and Societies: IEEE Eta Kappa Nu (HKN), ECE Student Advancement Committee (SAC)

WORK EXPERIENCE

Data Science Intern

Blue River Technology

Summer 2021

Sunnyvale, CA

- Researched and developed an internal framework to perform scalable analysis of image similarity on millions of images, using both classical and machine learning methods.

Software Development Intern

Citrix Systems

Summer 2019

Raleigh, NC

- As part of the ShareFile team, I added email functionality using an in-house ShareFile API to an existing bot deployed in Amazon Web Services. Additionally updated the bot's frameworks to the newer and cross-compatible .NET core platform, allowing the deployment to be moved from a Windows to a Linux host.
- Diagnosed and implemented fixes for 5+ customer issue and security vulnerabilities in the ShareFile Platform.

Associate Engineer Intern

NIO

Summer 2018

San Jose, CA

- Developed a Python library to automate the testing of the NIO ES8 infotainment unit, as well as log data and take pictures for later analysis.
- Developed a suite of test scripts using the above Python library to automate the testing process for environmental (DV/PV) testing. These scripts test various infotainment hardware connections and thermally stresses the CPU using time profiles based on different automotive test specifications.

Electric Powertrain Intern

Lucid Motors

Summer 2017

Menlo Park, CA

PROJECTS

Block-Matching ConvNet

An exploration using block-matching and CNNs for denoising

🌐 github.com/dbisk/bmcn

Dec. 2020

- Explores combining a Convolutional Neural Network with block-matching, inspired by the BM3D algorithm, to denoise images in PyTorch.
- The implementation achieved reasonable denoising quality (PSNR > 20dB) across a range of noise variances ($\sigma = 5-100$), though underperformed when compared to the BM3D algorithm for specified noise variances.

SKILLS

Human Languages: English, Mandarin Chinese (fluent), Japanese (intermediate)

Programming Languages: Python, C, C#, C++, SystemVerilog

Tools and Software: PyTorch, Amazon S3/AWS, Git