

Joshua Little

647-551-1504 | ejoshua.little@gmail.com

EDUCATION

York University

Master of Science in Computer Science

Toronto, ON

Expected April 2028

York University

Bachelor of Science in Computer Science, Specialized, Honours

Toronto, ON

April 2026

- **Coursework:** Data Mining, Computer Vision, Applied Machine Learning

RESEARCH INTERESTS

- Computer Vision
- Deep Generative Models
- Machine Learning
- Computational Photography

EXPERIENCE

Research Assistant

York University, Prof. Shweta Mahajan

02/2026 – present

Toronto, ON

- Researching intuitive physics in machine learning.
- Improving motion prediction in video generative models.
- Implementing SOTA generative models in HPC environments.
- Conducting comprehensive review literature of current research in generative modeling.
- Participating in weekly meetings with the Principal Investigator to discuss progress, challenges, and next steps.

Research Assistant

York University, Prof. Michael S. Brown

03/2025 – 12/2025

Toronto, ON

- First co-author of a computational photography paper accepted to ECCV 2026.
- Proposed a novel method for color constancy, achieving a 22% improvement over traditional methods.
- Designed and conducted experiments to validate proposed methods.
- Built data processing pipelines for three color constancy datasets.
- Developed a lightweight MLP-based color mapping model using a novel input.
- Captured two color constancy datasets focused on challenging illuminations.

Junior Software Developer

York University, eServices Office

05/2022 – 08/2024

Toronto, ON

- Built a course calendar using C#, tracking classes for over 700 faculty and 21K students.
- Automated workflows using .NET 6 and Python, including systems that process 4,000+ petitions annually.
- Developed a WordPress plugin to help researchers make informed decisions about data storage solutions.
- Collaborated with faculty to build a self-guided course and implement gamified Moodle course formats.

PUBLICATIONS

Off the Planckian Locus: Using 2D Chromaticity to Improve In-Camera Color

*SaiKiran Tedla, *Joshua Little, Hakki C. Karaimer, Michael S. Brown

2026

ECCV

PROJECTS

CheapElectrics | Java, Nginx, AWS, Kubernetes, Docker

- Developed containerized distributed e-commerce site, deployed in the cloud using Amazon EKS.
- Implemented vehicle recoloring using YOLO for object segmentation and linear algebra for color modification.

Object tracker | Python, Flask, OpenCV, NumPy, Adafruit

- Built on a pan-tilt motor using an embedded systems camera with USB connection to a Beaglebone SBC.
- Combined object detection with LK optical flow to keep an object centered in the frame.
- Completed for Embedded Systems course; received A+ on the project.

TECHNICAL SKILLS

Languages: Python, Java, PHP, JavaScript, HTML, CSS, SQL

Frameworks & Libraries: PyTorch, NumPy, Pandas, Scikit-learn

Development: Git, Docker, SpringBoot, React, Nginx, LaTeX