

Kairo T. Morton

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Education	Massachusetts Institute of Technology (MIT) Candidate for B.S. in Artificial Intelligence and Decision Making GPA: 4.3 Coursework: Advances in Computer Vision, Quantitative Methods for NLP, Linear Algebra and Optimization, Intro to Computer Graphics, Robotics: Science and Systems, Optimization Methods, Machine Learning for Inverse Graphics	Cambridge, MA Class of 2024
Experience	MIT CSAIL Scene Representation Group Undergraduate Researcher Work with a postdoc supervisor to research problems related to 3D generative models, generalizable neural radiance fields, and self-supervised 3D representation learning. Google Research (Google Translate) Student Researcher Defined a research problem related to contextual Neural Machine Translation on webpages Trained and evaluated large transformer neural networks for machine translation using various sources of additional context Implemented new model architectures for incorporating context in Jax and data pre-processing pipelines in C++ Google Research Research Intern Outlined a research project and developed a novel architecture to try and solve the video question and answering problem Trained and evaluated large scale multi-modal (image-text) models Collaborated with full-time researchers to implement data loaders, parsers and evaluation metrics in TensorFlow and Jax for a variety of image-text datasets Yale University (R.O.S.E group) Computer Science Research Assistant Outlined a research problem regarding program synthesis Developed a novel solution utilizing machine learning which improved synthesis time by 48% First Author of a Research Paper (<i>Grammar Filtering for Syntax Guided Synthesis</i>) that was accepted for an oral presentation at the AAI-20	Cambridge, MA 01/2023-Current Mountain View, CA 05/2022-08/2022 Remote 06/2021-09/2021 New Haven, CT 01/2019-01/2020
Publications	Video Question Answering with Iterative Video-Text Co-Tokenization (ECCV '22) Grammar Filtering for Syntax Guided Synthesis (AAAI '20)	
Skills/Awards	Awards: 2019 Bermuda Tech Award (Most Innovative Youth Project) Programming: Python, Javascript, HTML, CSS, C, C++ Frameworks: PyTorch, Jax/Flax, TensorFlow, Scikit-Learn, OpenCV, AWS (S3, DynamoDB, Cognito, Amplify), Flask, React	