# Jacques Fleischer

jacquespfleischer@gmail.com

## EDUCATION

**University of Florida**
*Bachelor of Science - Computer Science*
- 4.0 GPA — Dean's List
- 2024 Barry Goldwater Scholar

January 2023 – May 2025
Gainesville, FL

**The Honors College at Miami Dade College**
*Associate in Arts - Computer Science*
- 4.0 GPA — Dean's List
- Recipient of Honors College Fellows Award

August 2020 – July 2022
Kendall, FL

## RESEARCH EXPERIENCES

**Modern AI and Learning Technologies Lab**
- Trained a YOLOv8 model with convolutional neural networks in Python to detect dangerous traffic patterns and classify vehicles with 99% accuracy in Dr. Ranka's lab
- Built a Vue and NodeJS web interface for traffic footage that queried MySQL databases and decreased manual code expenditure by 75%

January 2023 – Present
University of Florida

**Computing for Global Challenges REU – Biocomplexity Institute**
- Optimized a machine learning earthquake forecasting model with Python on the Rivanna supercomputer to a Normalized Nash-Sutcliffe Efficiency of 98.3%
- Used TensorFlow and PyTorch to implement long short-term memory model for meteorological cloud masking application

May 2022 – January 2024
University of Virginia

**FGLSAMP REU Data Science and AI with FAMU**
- Predicted blockchain-based cryptocurrency price changes using machine learning and Python within $0.229 USD accuracy
- Leveraged Git source control system to keep track of code versions

June 2021 – December 2021
Florida A&M University

## RESEARCH PUBLICATIONS

1. **Opportunities for enhancing MLCommons efforts while leveraging insights from educational MLCommons earthquake benchmarks efforts.** Gregor von Laszewski, Jacques Fleischer, Robert Knuuti, Geoffrey C. Fox, Jake Kolessar, Thomas Butler, Judy Fox. 2023. *Frontiers in High Performance Computing*, 1. doi: 10.3389/fhpcp.2023.1233877
2. **Templated hybrid reusable computational analytics workflow management with Cloudmesh, applied to the deep learning MLCommons Cloudmask application.** Gregor von Laszewski, Jacques Fleischer, Geoffrey C. Fox, Juri Papay, Sam Jackson, Jeyan Thiyagalingam. 2023. *2023 IEEE 19th International Conference on e-Science (e-Science)*, Limassol, Cyprus, pp. 1-6, doi: 10.1109/e-Science58273.2023.10254942

3. **Hybrid reusable computational analytics workflow management with Cloudmesh.** Gregor von Laszewski, Jacques Fleischer, Geoffrey C. Fox. 2022. *arXiv preprint*. doi: 10.48550/arXiv.2210.16941
4. **Time series analysis of cryptocurrency prices using long short-term memory.** Jacques Fleischer, Gregor von Laszewski, Carlos Theran, Yohn Jairo Parra Bautista. 2022. *Algorithms*, 15, 230. doi: 10.3390/a15070230

## SKILLS & INTERESTS

- **Skills:** Strong leadership skills; Python; GitHub; fast typing speed of 140 WPM; Adobe Certified Associate in Premiere Pro; Slurm; Linux; Sony Vegas Pro; Adobe Illustrator and Photoshop; Slack workspace management; computer technician with advanced remote tech support skills
- **Interests:** Programming; building computers; video editing; hiking; soccer; 40s jazz