GUY **PAISS**

Software Developer · https://www.guypaiss.dev

Paissguy@gmail.com · linkedin.com/in/guy-paiss/ · +1 (604)-790-3676

Technical Skills

Python – Cupy, Flask, cv2, Numpy, Bokeh, Pandas, Matplotlib, Pytorch, Tensofrflow, Keras, Scikitlern. Peewee. C++ - CUDA, OpenCV, PyQt. C - Labwindows Web Development – PHP, Laravel, React, Typescript HTML, JS. Matlab, R, Databases – MySQL, PostgreSQL, SQLite. Visualisation - Tableau, Power BI. Cloud – Azure. Version Control – Git, SVN. Deployment - Docker. Electro-Optics – Zemax, Lumerical. CAD - Autodesk Solidworks. AI Automations – N8N, MindPal, Zapier, Buffer, MS Office. Linux, Windows, Android.

Profile

Software Engineer professional with 4+ years of professional experience and a Master's of Science in Optics and Microscopy and deep interest in imaging technologies and AI image manipulation. Adept at analytical problem solving, versatile and can handle more than one layer of the stack.

Professional Experience

Abili-Tech – AI Researcher intern
Vancouver, BC
September – Present
- Designing and Implementing transformer (encoder-decoder) neural network for transforming text to sign language (ASL).
- Makes use of pretrained models for natural language processing (transformer for text/gloss), image-to-image translation (pix2pixHD), and body pose estimation.
- Working in Linux – Ubuntu environment to develop our product.
- Experience building ML solutions with scikit-learn, TensorFlow, and PyTorch, to build deep neural networks for transforming text to sign language.
- Working with WordPress for updating and developing new features.

JobHuntingU – AI Integrator Internship
Vancouver, BC
October – Present

- Automate company workflows using N8N, Mindpal, Zapier and Buffer to automatically generate and post social media advertisements.
- Perform Web Scraping to gather and analyze potential client's data.
- Working with Webhooks and sockets, restful APIS.

CashGrow – FullStack Engineer
Vancouver, Canada
August 2025 – Current
- Experience working with PostgreSQL platforms as the app OLTP.
- Developing the app using typescript, node.js and react as frontend and backend technologies.
- Containerized and distributed applications using Docker
- Deployed the Backend project using Google Cloud Platform
- Deployed the Frontend using Netlify.
- Working with Database Servers (NeonDB)

TRIEYE – COMPUTER VISION DEVELOPER (start up)
Tel Aviv, IL
Febuary 2023-April 2024

- Designed and implemented advanced algorithms for NUC, denoising, motion correction and image stitching
- Developed NUC algorithms using SBNUC and LABNUC techniques, incorporating filters.
- Created an image stitching algorithm that leveraged Poisson reconstruction and GPU acceleration (Cupy), optimizing the seamless merging of image regions.
- Implemented motion correction algorithms using CUDA (Cupy), leveraging ego-motion estimation (homography) and image registration techniques (SIFT)
- Prototyped algorithms in Python (POC) and implemented them in C++ using OpenCV in Linux environment.
- Utilized a version control system like GIT and SourceTree for code management
- Gained experience with IR imaging sensors and gated imaging techniques.

ISRAEL AEROSPACE INDUSTRIES – COMPUTER VISION DEVELOPER
Be'er Yaakov IL
December 2021- February 2023

- Led the design and implementation of algorithms for NUC, denoising and tracking
- Developed motion correction algorithms using optical flow techniques
- Designed tracking algorithms using RANSAC and Kalman filters
- Worked with Costumers for proof of concept purposes while implementing cutting edge algorithms.
- Conducted research and prototyping for object detection and recognition algorithms
- Developed a GUI to test various codes using Matlab, R and Python
- Performed data analysis queries using MySQL for large databases
- Documented algorithms in Microsoft Office (MS Office), Word and LaTeX
- Utilized SVN for version control.

EDUCATION

Microsoft Azure AI900 Professional Certificate
Vancouver, BC

M2M DataTalent Certificate
Vancouver, BC

NPower Data Analyst Certificate
Vancouver, BC

MSc with Honours in Semiconductor Spectroscopy
Tel Aviv University
2018-2021

- Hands-on lab experience in designing and constructing optical microscope setups using Zemax and Thorlabs equipment
- Integrated devices such as photodiodes, piezoelectric stages and lasers into custom C code programmed a multithreaded UI in CVI (LabWindows). Developed UI using Qt and PyQt for Data Analysis.
- Designed and manufactured key laboratory components using 3d CAD programs such as solidworks and Autodesk.
- Gained in-depth knowledge in linear and non-linear optics, solid-state physics, imaging sensors and spectroscopy.
- Developed strong analytical and problem-solving skills
- Publication: Time-resolved circularly polarized luminescence of Eu^{3+}-based systems

BSc in Computer Science and Chemistry
Tel Aviv University
2011-2014