GERRIT KROT - SOFTWARE ENGINEER

Masters Graduate specialized in delivering optimized, secure code while maintaining best practices.

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WORK EXPERIENCE

Software Developer
Waygate Technologies

📅 January 2023 – June 2023   📍 Skaneateles, NY

- Acted as primary developer on proprietary Windows Forms Application
- Wrote User Stories, Features, and managed Azure Dev Ops Repository

`C#` `.Net` `WPF` `XAML`

Software Development Intern (2 Rotations)
Ansys

📅 August 2021 – August 2022   📍 Remote

- Wrote Unit tests for Ansys Apps (Spaceclaim, Discovery)
- Integrated the ability to run python scripts in app for Unit Tests
- Communicated with a large, distributed team to solve complex problems

`C#` `Python` `gRPC` `Git`

PROJECTS

Stage Lighting Recognition using a Genetic Algorithm
gerritkrot.github.io/articles/StageLightingReplication

- Developed Unreal plugin that learns lighting information from an image
- Uses a genetic algorithm to solve lighting directions and intensities

`C++` `Unreal Engine` `Optimization`

End-to-End Encrypted Multithreaded Messaging App

- Created web-based, multithreaded Messaging Application
- Uses End-to-End Encryption to ensure client privacy

`React JS` `Typescript` `Go` `Secure Coding`

Self-tuning Firefly Algorithm Analysis

- Reproduced a self-tuning Firefly Algorithm developed by Xin-She Yang.
- Analyzed meta-meta-heuristic impact on algorithmic performance

`Python`

Charity Stream Management Software
gerritkrot.github.io/articles/StreamOverlays

- Developed UI Applications to show Donation Goals and notifications in Unity
- Helped run multiple charity streams that raised over $8,000 for the Stonewall Charity Foundation and Save the Children

ACADEMICS

Rochester Institute of Technology
Masters Computer Science

📅 Graduated December 2024

- 4.0 GPA

RELEVANT CLASSES

- Intro to Machine Learning (CSCI635)
- Bio-Inspired Intelligent Systems (CSCI633)
- Applications in Virtual Reality (CSCI715)
- Global Illumination (CSCI711)
- Distributed Systems (CSCI652)

SKILLS

`Multi-threaded Development` `Machine Learning` `Pytorch` `scikit-learn` `Tensorflow` `User Story Management` `Unreal Engine` `Unity` `WPF` `Secure Coding` `Optimization` `Research` `Communication` `Scrum Development Process`

LANGUAGES

`C++` `C#` `C` `React JS` `Go` `HTML/CSS` `Javascript` `Java` `Python`

EXTRA CERTIFICATIONS

Open CV
Computer Vision Certification

📅 In Progress

- Formalizes image analysis techniques using the Open CV API in Python.
- Certifies ability to use Deep Learning for text, face and object detection, and pose estimation.