

GERRIT KROT - SOFTWARE ENGINEER

Masters Graduate with a strong background in Artificial Intelligence and Graphics Programming.

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in linkedin.com/in/gerrit-n-krot

🔗 gerritkrot.github.io/

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

AWS

Software Development Intern (2 Rotations)

Ansys

📅 August 2021 – July 2022

📍 Remote

- Wrote Unit tests for Ansys Apps (Spaceclaim, Discovery)
- Integrated the ability to run python scripts in app for Unit Tests
- Updated inter-software communication API

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

Self-tuning Firefly Algorithm Analysis

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

Ray Tracing Prism Simulation

gerritkrot.github.io/articles/PrismSimulation

- Created ray tracer that considers different frequencies of light
- Simulates light refracting through a prism to create a rainbow effect
- Uses backwards ray tracing methodology with projected volumes of light

Charity Stream Management Software

gerritkrot.github.io/articles/StreamOverlays

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

C#

Unity

Godot

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 / AI (CSCI633)
- Applications in Virtual Reality (CSCI715)
- Global Illumination (CSCI711)
- Computer Animation Algorithms (CSCI712)
- Programming Language Theory (SWEN740)

SKILLS

Machine Learning

Technical Writing

User Story Management

WPF

Unreal Engine

AWS

Git

Unity

Visual Studio

Scrum Development Process

LANGUAGES

C#

C++

HTML/CSS

Javascript

Open GL

CUDA

Python

Java

Basic

Assembly MIPS

EXTRACURRICULARS

RIT Esports

Operations Admin

📅 August 2019 - Present

- Oversee all Esports events, streams, graphic design and marketing materials
- Developed "Competitive Leap," A program that helps casual players make the jump to competitive play