

NEIL CLARKE

SOFTWARE ENGINEER

Hard working and versatile programmer adept at problem-solving and development in agile environments. Works well alongside other developers and designers as well as individually. Strives to achieve the best results as efficiently as possible.

KEY SKILLS

Software

- Unreal Engine 4
- Nodejs
- OpenCV
- Ruby on Rails

Languages

- C++
- TypeScript
- Python
- Lua

Misc.

Blender3D GIMP Arduino

PROFESSIONAL DEVELOPMENT

Full Stack JavaScript Development (Udacity Nanodegree, 2021)

- Use NodeJS, Express, PostgreSQL & Angular to develop front end website and backend RESTful API hosted on Amazon Web Services (Elastic Beanstalk, S3, RDS)

Robotics Software Engineer (Udacity Nanodegree, 2021)

- Crash course in Gazebo and the C++ Robot Operating System (ROS) focusing on Localization, SLAM and path planning in order to develop a home service robot



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https://github.com/null-usr

EXPERIENCE

2018 - Software Engineer

2019 *DigitArena - Le Bouveret, Switzerland*

Realization, testing, packaging and maintenance of real-time video feed personalization graphic engine.

- C++ graphic overlay event system controlled via UDP or ancillary data
- Video encoding/decoding, OpenCV, video card programming (AJA)
- Scripting (C++, Python, FFMPEG and shell) during live sporting events (Linux & Windows)
- Integration of product into broadcast pipeline, interfacing with proprietary software and meeting TV broadcast standards.

May- Writer, Technical Artist & Systems Programmer

August 2017 *Independent Game Development - Troy, NY*

Third place winner at New York State Game Development Competition

- C# item crafting, interaction & serialization
- Node based dialogue tree, GUI & event system
 - Unity Editor GUI to help team create and edit XML dialogue tree including callbacks using partial classes and reflection
- Vertex and fragment shader programming

July- GUI Designer (intern)

August 2016 *European Organization for Nuclear Research (CERN) Geneva, Switzerland*

Build GUI for data transferal, surface level analysis & data visualization

- QT Designer & NumPy to store large data sets to be represented in the GUI
- Threading included to cut down on user wait time and prevent program freezes while processing data

EDUCATION

July- REVEAL - Emerging Ventures Ecosystem

August 2017 Rensselaer Polytechnic Institute - Troy, NY
RPI Acceleration program geared towards providing key knowledge, tools and resources to launch start-up companies

2014- BS Computer Science and Games & Simulation Arts & Sciences Dual Major

2017 Rensselaer Polytechnic Institute - Troy, NY

PROJECTS

Ruby on Rails Property Listing Website (ongoing)

Property website that allows the owner to create an account (Devise Gem), perform CRUD operations on listed properties, schedule rentals and make payments using Paypal. Also includes Google Map location on each property.

Love2D Game Development (ongoing)

Build and use Entity Component System using Lua in order to assist in development of a 2D space-themed game focused on orbital mechanics.

Future goals include path-finding in Newtonian space using hierarchical path-finding (HPA*), Q-Learning for AI and multiplayer