

Alexander Roan

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Summary

Alexander Roan has a great skills over 15 years and high experiences on Computer Graphics, Vision and Artificial Intelligent Professional.

My experiences and field is Computer Vision and Graphics related:

- Computer Graphics
 - > High quality rendering quality
 - > Realtime Ray Tracing
- Massive Rendering
 - Z-Fighting : Depth Partition, Reverse Depth
 - Accurate Rendering : Inverse Matrix Precalculation
 - Transparency : Depth Peeling
- CAD
 - > lightweight 2D/3D cad, BIM modeling architecture.
- Computer Vision
 - > Face landmark detection and gaze estimation
 - > Object detection in video
- Data Simulation and Visualization
 - > Solar System
 - > Euro Space Simulation Assistant
- Game Application
 - Artificial Intelligent with Deep learning
 - > Convolutional Neural Network and Deep Learning.
 - > Prisma Styling of Image and Video using Deep Learning on mobile locally even.
 - > detection of object using CNN on mobile.
 - > Recognition People in a group using Deep learning
- Object detection
- Face recognition
- Text extraction from natural image
- Segmentation
- Pose estimation Net
 - > Deep Fashion
 - > RCNN(Region CNN)
- Virtual Reality
- Augmented Reality with SLAM
- Cuda/OpenCL/Mobile Parallel Computing.

Development Skills:

- C/C++/C#/Java/Objective-C/Swift/CMake
- Cross Platform development including mobile and embedded even.
- OpenGL/DirectX, OpenCV, dlib, Torch, TensorFlow, Unity, WebGL/Javascript
- Python, Scripts based installation

Robust and Stable System Design:

- UML/RAISE based Big Software System rigorous design and validation.
- Petri-Net based Parallel System design detecting deadlock and data corruption.

Experience



Intern

VisionLab GmbH & Co. KG

Jul 2020 - Present (2 months +)



Software Engineer

Cesium Solutions

Sep 2015 - 2019 (4 years 4 months)



Software Developer

Cosomedia GmbH & Co. KG

Jun 2016 - Apr 2018 (1 year 11 months)



R&D in AR and Deep Learning

Self-Employed

Jul 2008 - Feb 2012 (3 years 8 months)

Skills

Augmented Reality (AR) • C++ • Deep Learning • Object-Oriented Programming (OOP) • Software Development • Unified Modeling Language (UML) • Project Management • Leadership • Computer Vision • SLAM