


Alexander Roan

Paderborn, North Rhine-Westphalia, Germany

 [linkedin.com/in/alexander-roan-36143b112](https://www.linkedin.com/in/alexander-roan-36143b112)

 alexanroan@gmail.com

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