

# Kaloyan Penev

Computer Vision Engineer



## ABOUT ME

Problem-solver interested in machine learning and computer graphics. Professional experience using Unity for NCCA Bournemouth University on the VISTA AR project. Familiar with Object Oriented and Entity-Component-System programming paradigms. Adaptive and creative in team environments.

## PROJECTS

### HAND POSE RECOGNITION

Python / YOLOv4 / Darknet

Real time speed on consumer-grade GPUs using input from ordinary phone cameras. Built with the YOLOv4 FCNN.

### GAME ENGINE - eudaimonia

C++17 / C / OpenGL / GLSL

Data-oriented ECS framework in native C++17 as backbone.  
3D Physically Based Renderer made with OpenGL 3.3 as graphics system.



+44 7500 652536



kdpenev@gmail.com



<https://penev.me>

## EXPERIENCE

### JUNIOR UNITY DEVELOPER

Bournemouth University • Feb 2020 – Jul 2020

- Development and profiling of AR apps in **Unity**
- Performance optimization for mobile devices
- Shader programming with **HLSL** and Shader Graph

### STUDENT AMBASSADOR

Bournemouth University • Sep 2018 – Present

- Active engagement in the Admissions division
- Garnered rich teamwork experience
- Improved presenting and communication skills

## EDUCATION

### BSc GAMES SOFTWARE ENGINEERING

Bournemouth University • Sept 2018 – Jun 2021  
First class Honours (Predicted)

- Graphics and Computational Programming – 83.03%
- Game Engine Programming – 79.00%
- AI Game Programming – 75.50%

## LANGUAGES

