JEAN-BAPTISTE MORICE

Computer Graphics Engineer

SUMMARY



I am a recently graduated software engineer specialized in computer graphics and digital image processing. I am currently looking for a job as a C++ developer on projects involving rendering, game development, or virtual/augmented reality.

| Programming: | Operating Systems : |
|---------------------------------------|---|
| C C++ C# Java Python PHP HTML & CSS | Windows Linux |
| Computer Graphics : | Tools : |
| Unity OpenGL GLSL Vulkan | Git Visual Studio |
| Libraries: | |
| Qt OpenCV | Personal: |
| Databases : | Teamwork Communication Project Management |
| MySQL PostgreSQL Microsoft SQL Server | Agile Software Development |

EDUCATION



Engineering Degree in Computer Science

École Supérieure d'Ingénieurs de Rennes (ESIR)

2015 - 2018

A french engineering degree in computer science with a specialization in computer graphics and digital image processing from a competitive engineering school attached to the University of Rennes 1. Courses:

- Rendering
- Digital Image Processing
- Compilation for Digital Imaging
- Human-computer Interactions
- Image Classification

- Video Compression
- Computer Vision
- Special Effects
- Video Games

Two-year University Degree in Computer Science

Institut Universitaire de Technologie de Laval

2013 - 2015

A two-year university degree in computer science. Approximately equivalent to a Diploma of Higher Education in the UK, or an Associate's Degree in the US. Courses:

- Algorithms, Data Structures and Programming
- Object-oriented Programming
- Software Architecture
- Human-computer Interactions

- Databases
- Operating Systems
- Networks

Baccalauréat Général Scientifique Mention Européenne

Lycée Saint-Martin

2010 - 2013

French secondary school diploma. Approximately equivalent to A Levels in the UK, or an High School Diploma in the US.

Diplôme National du Brevet

Collège Saint-Hélier

2006 - 2010

Approximately equivalent to GCSE'S under C Grade / GNVQ Intermediate, in the UK, or 9th Grade in the US.

EXPERIENCE



Virtual Reality R&D Engineer Intern

B<>COM

March - September 2018

♥ Cesson-Sévigné, France

As part of this end-of-study internship for my engineering degree, I took part in an exploration of new research topics for a research and development laboratory. I was tasked with studying the possible interactions in virtual reality between synthetic 3D content (produced by a graphic designer) and 3D content captured from reality (photogrammetry, 360-degree photos and videos, etc.), and to develop demonstrators highlighting the identified technological barriers which could be the subject of new research projects.

Responsibilities and missions:

- Scientific and technical watch
- Writing of a 3D reconstruction techniques state-of-the-art
- Classification of content hybridization possibilities
- Development of three prototypes: tangible interactions in virtual reality with objects reconstructed using photogrammetry, enhanced omnidirectional content to allow selection, navigation in virtual reality in different type of contents captured from reality

3D Rendering Engineer Intern

SOGITEC

Bruz, France

As part of this internship, I assessed the relevance of the Vulkan graphics API as a replacement for OpenGL in a real-time 3D rendering engine used for flight simulation. I was tasked with implementing it on a subset of the engine, then evaluating the potential performance gains, and finally proposing a methodology to perform the API change over the entire engine.

Responsibilities and missions:

- Implementation of the Vulkan graphics API on a basic subset of the real-time 3D rendering engine
- Performance gains assessment
- Assessment of the efforts involved in performing the API change over the entire engine
- Definition of a strategy to perform the graphics API change

IT Project Manager Intern

FIT

June - August 2016

Rennes, France

As part of this internship, I contributed to initiate and plan an improvement project for the company's information system. I was tasked with performing needs assessments and expressing functional specifications for the improvement of the current Enterprise Resource Planning software (ERP) and for the purchase of a Customer Relationship Management software (CRM). I was also charged with various system administration and maintenance tasks, as well as improving reports from a Business Intelligence (BI) system.

Responsibilities and missions:

• Analysis and assessment of requirements with every department for an update of the ERP

- Planning and budgeting of future changes with internal managers and the external service provider in charge of the ERP
- Analysis and assessment of requirements with the sales department for the purchase of a CRM
- Maintenance and evolution of Business Intelligence reports based on ERP data extractions
- System administration and user support

Software Developer Intern

MPO

April - August 2015

♀ Vilaines-La-Juhel, France

As part of this end-of-study internship for my two-year technical degree, I was tasked with the functional analysis, design, and development of a software interface (a web-service) between a Desktop Publishing (DTP) workflow engine and a Manufacturing Execution System (MES).

Responsibilities and missions:

- Needs collection and analysis
- Writing of the functional and technical specifications for a solution
- Development of the solution

VOLUNTEERING



Events Coordinator

ISATI (ESIR's Student Office)

2015 - 2016

Planning, budgeting, scheduling and management of various events aimed toward ESIR students'.

AWARDS





Industrial Project Winner of the 2018 Enterprise Award ESIR & Sopra Steria



Award received for the work done during our industrial end-of-study engineering project. This project, commissioned by Cooper Standard, aimed to establish a sample preparation protocol for syntactic foam porosity analysis and develop an accompanying image analysis tool.



"Disability Awareness" Challenge Nuit de l'Info 2013 & Oracle

Movembre 2013

Award received for the writing of a report detailing various recommendation to improve accessibility for people with disabilities when designing user interfaces. This work was the result of a challenge proposed by the Oracle company during the "Nuit de l'Info 2013" hackathon.

LANGUAGES



• French - Native speaker

- German Elementary (CEFR A2)
- English Advanced (TOEIC 990/990 CEFR C1)

INTERESTS



- Music
- Reading
- Video Games : Mirror's Edge, Okami
- Sports : Judo, Table-Tennis

- Travelling : England, Ireland, Germany, Turkey, Czech-Republic
- Personal programming projects