JEAN-BAPTISTE MORICE

Computer Graphics Engineer

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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 software engineer on projects involving computer graphics with a focus on rendering or virtual/augmented reality.

SKILLS 🔧

Programming :

C   C++   C#   Java   Python   PHP   HTML & CSS

Computer Graphics :

Unity   OpenGL   GLSL   Vulkan

Libraries :

Qt   OpenCV

Databases :

MySQL   PostgreSQL   Microsoft SQL Server

Operating Systems :

Windows   Linux

Tools :

Git   Visual Studio

Personal :

Teamwork   Communication   Project Management   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
- Computer 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

📅 June – September 2017   📍 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

📅 December 2018

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

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

INTERESTS 🎵

- Music
- Reading
- Video Games : Mirror's Edge, Okami
- Sports : Judo, Table-Tennis
- Travelling : England, Ireland, Germany, Turkey, Czech-Republic
- Personal programming projects