

Paris area, France

Dr Armelle Bauer

R&D SOFTWARE ENGINEER

✉ armelle.bauer.ab@gmail.com | 🏠 duck-anatomy.com

With a computer graphics background, my main interests relates to real-time, characters animation, virtual humans, interactions and crowds behaviors, mixed reality, AI algorithms. Highly motivated I am looking to create and work on intuitive, innovative and disruptive tools.

Skills

languages python, C++ 14, Qt5/Qml

Concepts optimization, multi-threading, TDD, Scrum

Tools Maya, Blender, git, CMake, Conan, Docker, MSVC, VS Code

API Alembic, Fbx, glTF, Pixar's Usd, OpenMP

Experience

PocketStudio

06/2017 – now – Paris, France

R&D SOFTWARE ENGINEER

- An innovative real-time and collaborative tool to create 3D movies.
- Real-time 3D visualization - multi-threading, bots to test collaborative and conflicts engine, unit tests
- technical papers implementation & computer graphics algorithms - importers: obj, fbx, alembic, gltf
- Gui: Interaction - Qml Widgets Creation - Through software layers, to collaborative engine
- C++ 14, Qt5/Qml, Python, Vulkan & shaders, Conan, Go, Docker, Kubernetes, SQLite, git, GitLab CI

Anatoscope

11/2016 – 02/2017 – Grenoble, France

3D SOFTWARE ENGINEER

- Real-time 3D visualization algorithms, motion capture algorithms, augmented reality applications
- Technology transfer: from research development to a business finalized product - CES presentation
- Research in real-time image registration for Augmented Reality improvements
- C++ 11, Python, Qt/Qml, Kinect, Sofa, MSVC, Maya, Blender

TIMC, GMAO team - INRIA Rhône-Alpes, Imagine team

10/2013 – 11/2016 – Grenoble, France

PHD: USER-SPECIFIC REAL-TIME REGISTRATION AND TRACKING APPLIED TO ANATOMY LEARNING

- Augmented reality real-time anatomically correct mirror - 2D/3D registration
- User-Specific Anatomy Registration based on Kinect partial and noisy data as input
- Efficient Body Tracking and GPU Animation: Linear Blend Skinning, joint constraints
- Project Management: planning, development, design, advertising, setup and legal aspects
- Mentoring: 11 internships - Publications: 4 - Demos: CES 2016 and 3 others.
- C++ 11, Python, Kinect SDK, Sofa, Qt5/Qml, OpenGL, GLSL, Maya scripting (python)

INRIA Rhône-Alpes, Imagine team

09/2012 – 08/2013 – Grenoble, France

EXPERT ENGINEER - MY CORPORIS FABRICA: ANATOMY MODELING BASED ON AN RDFs ONTOLOGY

- visualize anatomical structures - front-end/back-end - ergonomic interaction & navigation
- Anatomy transfert: Multigrid algorithm development and Maya Muscle scripting
- Python, WebGL, Django, Html5, CSS3, Maya scripting (python), OpenGL, SQL, RDFs

Education

University Joseph Fourier

2013 – 2016 – Grenoble, France

PHD IN COMPUTER GRAPHICS

UFR of mathematics and informatics

2010 – 2012 – Strasbourg, France

MASTER'S DEGREE IN COMPUTER GRAPHICS AND IMAGE PROCESSING

University of Franche Comté

2007 – 2010 – Besançon, France

BACHELOR'S DEGREE IN COMPUTER AND TECHNICAL SCIENCE

Worth Knowing

LANGUAGES

English - proficient

French - native

Spanish - native

Japanese - rudimentary

HOBBIES

Scuba diving - N3

Marine biology - soon FB1

Urban roller skate - 2 years

Music/Saxophone - 12 years

PERSONALITY TRAITS

Curiosity

Adaptability

Organization

Communication