

MARCO MARRA

RESEARCH SOFTWARE ENGINEER



Experience

Radboudumc • Diagnostic Image Analysis Group

Research Software Engineer

Jan 2021 - Dec 2021

Software development in lung cancer screening research and backend development for Django-based web app Grand-Challenge.org · Worked on a product team using agile practices and CI/CD systems · Picked up complex (CIRRUS on MeVisLab) web applications quickly · Picked up Docker and worked on app containerization, refactoring, testing, feature development, and code review

University of Twente • Biomechanical Engineering

Assistant Professor

Nov 2017 - Dec 2020

Setting up a DevOps culture within the research team, including CI/CD and version control tools, for code development aimed for reuse by fellow researchers and in student projects

Radboudumc • Orthopaedic Research Lab

Researcher

Jan 2014 - Oct 2017

Worked in a multicultural research project on development and validation of computational models of the implanted knee in OOP language and Python · Identified and evaluated solutions (including machine-learning and external C++ computational libraries) to improve model efficiency · Presented award-winning papers at international scientific journals and symposia

AnyBody Research Group • Aalborg University

Internship

Education

PhD in Medical Sciences Oct 2013 - Apr 2019

Thesis title: Personalized musculoskeletal modeling of the knee joint.

Master of Science in Biomedical Engineering

Sep 2011 - Jul 2013

Thesis title: Study of dens fracture in the elderly and the role of osteoporosis with a finite element model.

Erasmus exchange programme Sep 2012 - Jun 2013

Bioinformatics course: intro to Python, code version control and reusability

Skills

Python



MeVisLab



C++



Git



CI/CD



Docker



Projects