MARCO MARRA

Research Software Engineer

An intuitive, solution-oriented biomedical engineer with a passion for computers and technology. There are no impossible challenges, only complex problems to solve. That's what I stand for. I get energy from always learning new things and developing myself a step further.

EXPERIENCE

RESEARCH SOFTWARE ENGINEER ▽ **RADBOUDUMC · DIAGNOSTIC IMAGE ANALYSIS GROUP**
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

ASSISTANT PROFESSOR ▽ **UNIVERSITY OF TWENTE · BIOMECHANICAL ENGINEERING**
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

RESEARCHER ▽ **RADBOUDUMC · ORTHOPAEDIC RESEARCH LAB**
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

INTERNSHIP ▽ **ANYBODY RESEARCH GROUP · AALBORG UNIVERSITY**
Oct 2013 - Dec 2013 , Became acquainted with OOP language for musculoskeletal modeling AnyScript · Familiarized with enterprise-level CI/CD pipelines, version-controlled code and teamwork

EDUCATION

PHD IN MEDICAL SCIENCES
Thesis title: Personalized musculoskeletal modeling of the knee joint.

MASTER OF SCIENCE IN BIOMEDICAL ENGINEERING
Thesis title: Study of dens fracture in the elderly and the role of osteoporosis with a finite element model.

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

SKILLS

- › Python
- › C++
- › CI/CD
- › MeVisLab
- › Git
- › Docker