

# MARCO MARRA

Research Software  
Engineer



## EXPERIENCE

### RESEARCH SOFTWARE ENGINEER ▽ RADBOUDUMC · DATA 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

## PROJECTS

## 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 | ▽ MeVisLab |
| ▽ C++    | ▽ Git      |
| ▽ CI/CD  | ▽ Docker   |

mamarra@outlook.com; 06-26387540; Bijleveldsingel 54, 6524 AE Nijmegen; ;  
<https://github.com/marcopus>