

Brent Fokke Bram Huisman

✉ brent@huisman.pl ☎ +31 6 234 73237 🏠 brent.huisman.pl 📍 Near Maastricht, NL

Work experience

- 2020–present **Scientific Software Developer**, *Forschungszentrum Jülich, Jülich, Germany.*
- Product owner for Arbor, focused on neuroscience community engagement.
 - Arbor is an open source neural network simulation software package, runs on heterogeneous silicon, part of the Human Brain Project.
- 2017–2020 **Postdoctoral Researcher**, *Netherlands Cancer Institute, Amsterdam, The Netherlands.*
- Subject: Monte Carlo simulations of the radiotherapeutic process for dose reconstruction of daily X-ray treatments.
 - Wrote C/Python/Pascal binding to a commercial clinical treatment planning dose engine, enabling dose calculation outside of the commercial product.
 - Wrote a library/tool/GUI to compute dose for a given patient treatment.
 - Chaired the group meetings for one year.
- 2013–2017 **PhD Researcher**, *Creatis, IPNL, University of Lyon, France.*
- Subject: Treatment Monitoring in Proton Therapy using Prompt Radiation Imaging.
 - Built variance reduction method for a 1000x speedup in Monte Carlo simulations
 - Learned to work on computing clusters for clinical monte carlo simulations
 - Wrote a library for 4D image R/W/processing, an analysis framework used by later students.
- 2015 **Graduate Teaching Assistant**, *University of Lyon, France.*
Taught 20 students a practical course on non-destructive measurements with X-rays.
- 2013 **Undergraduate Teaching Assistant**, *University of Amsterdam, the Netherlands.*
Taught 80 students first year Physics course "Electromagnetism".
- 2012–2013 **Internship Software Developer**, *Academic Medical Center Amsterdam, the Netherlands.*
Wrote a tool to convert clinical treatment plans between different accelerators. The tool has been put to clinical use.
- 2011–2012 **Graduate Research Internship**, *Nikhef, Amsterdam, the Netherlands.*
- Subject: Construction of a Proton-CT device.
 - Developed a high speed trigger system (100khz+)
 - Wrote a device driver for HiSparc DAQ.
- 2008–2011 **Undergraduate Teaching Assistant**, *University of Amsterdam, the Netherlands.*
Taught over 400 Liberal Arts and Sciences students a first year course "Introduction to Physics".

Education

- 2013–2017 **PhD from the Electrical, Electronics and Automation Doctoral School**, *University of Lyon, France.*
- 2010–2012 **Master of Physics, track Particle and Astroparticle Physics**, *University of Amsterdam, The Netherlands.*
- 2005–2010 **Bachelor of Liberal Arts and Sciences, major Physics**, *University of Amsterdam, The Netherlands.*

Advanced Courses

- 2018 **EMBO Laboratory Leadership for Group Leaders**, *EMBO, Heidelberg, Germany.*
Hands-on training on topics relevant for a leadership position. Subjects covered include team dynamics, leadership, personality styles, personal pitfalls and strengths.
- 2016 **IN2P3 School Of Statistics**, *CNRS, IN2P3, Autrans, France.*
The IN2P3 School Of Statistics gives an overview of the concepts and tools used in particle physics, astro-particle physics and cosmology when probabilities and statistics come to play.

- 2011 **Cern Summer School**, *Cern*, Geneva, Switzerland.
Developed TPC Slow Control monitoring panel for ATLAS SCADA control software.
- 2009 **Course Effective Meeting**, *Trainingsbureau TAQT*, Amsterdam, the Netherlands.
Learned how to effectively conduct, participate in and prepare for meetings.

Extracurricular Activities

- 2019–2020 **Postdoc council**, *Netherlands Cancer Institute*.
- Setting up off-boarding procedure together with HR. Aim is to generate statistics on why postdocs leave, help the institute create a better and more pleasant workplace, and feed data into future collective labour agreement (CAO) discussions.
 - Coordinator of the Postdoc Mentoring Program
 - Liaison with the Dutch national Postdoc organization.
- 2009–2010 **Member of the Faculty of Science Student Council**, *University of Amsterdam*.
- Negotiated 12% of workstations be low-power in the context of sustainability goals in the Tender Committee for Procurement of Desktop IT Equipment of the University of Amsterdam
 - Chairman of *Taskforce Education and Examination Regulations*, which is tasked to review, modify and ultimately greenlight the Faculty's proposed curricula for all Bachelor and Master programs
 - Chairman of *Taskforce Services* and liaison with the Faculty of Science head of operations
 - Set up a new website for the council, enabling modern communication with students and proper archiving of materials
 - After my term I chaired the Treasury Audit Committee and served on the Advisory Board of my party (Uvasociaal)
- 2009–2010 **Treasurer of the Study Association for Exact Sciences Amsterdam**.
- Realized a turnover of 155k€
 - Started book sales for first year students
 - Set up a new bookkeeping workflow, which is still used to this day (Gnucash-based)
 - Co-organized the yearly symposium with a Nobel Prize winner as a speaker
 - Secretary of the Consultancy Event, processed over 200 CVs and coordinated admission with the firms (McKinsey, Bain, BCG, Booz)
 - After my term I chaired the Treasury Audit Committee for 3 years

Grants and Awards

- 2016 **6 Month Individual Grant**, *Fondation ARC*, Villejuif, France.
- 2016 **Winning poster & talk**, *ICTR-PHE*, Geneva, Switzerland.

Coaching, Supervision

- 2019-present **Support PhD students of analysis package**, *University of Lyon*.
The analysis package developed during my PhD is being re-used by new PhD students. I support them and help getting them up to speed.
- 2019 **Bachelor intakes**, *Institute of Interdisciplinary Studies, University of Amsterdam*.
Conducted intake interviews with potential students for the Beta-Gamma Bachelor program.
- 2019 **Coach@Work**, *Institute of Interdisciplinary Studies, University of Amsterdam*.
Participated as alumnus as personal coach to a student.
- 2017-2018 **Scientific Supervision Of Master Student**, *Netherlands Cancer Institute*.
Co-supervised two students on a MSc-level graduation project.

Languages

- Human Dutch, English. Somewhat: French, German, Beginner: Polish
- Computer C++, Python. Somewhat: Java, Pascal, SQL
- Tools numpy, scipy, matplotlib, git, bash, CUDA, \LaTeX , Qt, Geant4/Gate, Arbor