

Joeri R. Hermans

Heuvelstraat 22
Lanaken, Limburg
Belgium

Phone: 0032-484-598473
Email: joeri.hermans@doct.uliege.be
Web: <http://joerihermans.com>

Born: October 16, 1992
Nationality: Belgian

Experience

2018-now European Organization for Nuclear Research
External Project Associate, EP
Geneva, Switzerland



2017-now University of Liège
Doctoral Student & Teaching Assistant
Liège, Belgium



2016-2017 European Organization for Nuclear Research
Technical Student, IT-DB, Scalable Analytics
Geneva, Switzerland



Summer 2015 Royal Meteorological Institute
Summer Intern, Data Management
Brussels, Belgium



Projects

2018-now Refractor • <https://github.com/JoeriHermans/refractor>
Gravitational lensing simulations with PyTorch.

2016-now Distributed Keras • <https://github.com/JoeriHermans/dist-keras>
Distributed Deep Learning with Apache Spark & Keras.

2016-now Hadoop Profiler • <https://github.com/cerndb/Hadoop-Profiler>
Asynchronous stack profiler for distributed systems.

2016 HackZurich Entry - SafeCar • <https://github.com/JoeriHermans/hackzurich-2016-entry>
All nearby cars communicate with each other, the infrastructure (e.g., traffic lights), and emergency services to maximize traffic safety and minimize injury.

- 2016 Warpdrive • <https://github.com/JoeriHermans/warpdrive>
Shell utility to navigate quickly between directories.
- 2014-now Intelligent Automation System • <https://github.com/JoeriHermans/Intelligent-Automation-System>
Flexible and very performant (home) automation system.

Awards & Grants

- FRIA Scholarship *National Fund for Scientific Research, Belgium*
- Best DKE Master Thesis 2017 *Maastricht University, The Netherlands*
On Scalable Deep Learning and Parallelizing Gradient Descent

Education

- 2017-now Ph.D. in Computer Science, University of Liège
- 2015-2017 M.Sc. in Artificial Intelligence, Maastricht University *8.11/10 GPA (A grade)*
- 2011-2014 B.Sc. in Computer Science with Physics minor, Hasselt University

Publications

- 2018 Gradient Energy Matching, NIPS 2018 (under review)
- 2017 Accumulated Gradient Normalization, ACML 2017
- 2017 On Scalable Deep Learning and Parallelizing Gradient Descent, CDS
- 2016 Developing and optimizing applications for the Hadoop environment, CHEP

Skills & Expertise

Programming Languages
C/C++ • Python • Java • SQL • PHP • Bash

Skills
Machine Learning • Distributed Computing • Web Development

Languages

Full professional proficiency: English
 Limited proficiency: French, German
 Native proficiency: Dutch

Interests

Astronomy • Physics • Optimization Algorithms • Simulation-based inference • Machine Learning
 • Neural Networks • Distributed Systems • Aviation • Photography