COEN DE VENTE

@ hello@coendevente.com   ⚲ coendevente.com   🎓 Google Scholar   in linkedin.com/in/coendevente

🐙 github.com/coendevente   📅 Born: 04-08-1996 in Zaanstad, the Netherlands

Enthusiastic about machine learning, computer vision and health.

EXPERIENCE

PhD in Deep Learning for Medical Imaging

DIAG @ Radboud University Medical Center & QurAI @ University of Amsterdam

📅 Sep 2019 – present   📍 Nijmegen & Amsterdam

- Researching applications for **ophthalmology** & **COVID-19**.
- Developing **uncertainty**-based techniques for deep learning generalization.
- Exploring generative methods (**diffusion models** and **GANs**) for optical coherence tomography (OCT) standardization.
- (Co-)authored publications in international journals (e.g., Radiology, IEEE TAI, Ophthalmology Science, TVST), conferences (e.g, ARVO and EURETINA), and ArXiv. See a full publication list on my website.
- Other tasks: deep learning cluster dashboarding, managing group publications on diagnijmegen.nl and qurai.amsterdam, teaching "AI for Medical Imaging" course.

Web developer

Freelance - for small enterprises and institutions

📅 2011 – 2019

- Used PHP and MySQL.
- Developed websites & CMSes, WordPress and WebFlow.
- Examples of clients: deventeadministratie.nl, buildbouw.nl

MSc graduation project

Philips Research

📅 Oct 2018 – Aug 2019   📍 Eindhoven

- Published a journal paper in IEEE TBME and an extended abstract for MIDL.
- Explored deep learning approaches for prostate cancer detection and grading from multi-parametric MRI.
- Full time (60 ECTS), grade: 9.0/10.

Internship

King's College London, St. Thomas Hospital

📅 Apr 2018 – Aug 2018   📍 London

- Used convolutional neural networks for left atrium and fibrosis segmentation in CardiacMR.
- Left atrium segmentation algorithm was **published as part of the MICCAI challenge STACOM 2018**.
- Full time (15 ECTS), grade: 9.5/10.

EDUCATION

MSc Biomedical Engineering

Medical Image Analysis (IMAG/e) @ Eindhoven University of Technology / Utrecht University

📅 Sep 2017 – Aug 2019   📍 Eindhoven

- Cum laude (average grade: 8.3/10).
- Focused on machine learning applied to medical imaging.
- Also followed Computer Science and Electrical Engineering courses.

BSc Biomedical Engineering

Eindhoven University of Technology

📅 Sep 2014 – Jul 2017   📍 Eindhoven

- Distinction: *with great appreciation*, honors program (30 ECTS), propedeuse: *cum laude*.

EXTRACURRICULAR ACTIVITIES

Competitive Programming and Problem Solving

Honors Academy of TU/e

📅 Sep 2016 – July 2017   📍 Eindhoven

- Participated in programming contests on algorithmic and engineering problems **(Google Hash Code, Facebook Hacker Cup, BAPC, EAPC)**.
- Developed **efficient algorithms** for specific problems in a friendly and competitive setting and learned to present algorithms and their implementations to peers.
- Equivalent of 15 ECTS.

Organization Google Hash Code Hub TU/e

g.co/hashcode

📅 Jan 2017 – Feb 2017   📍 Eindhoven

Chair Communications SensUs Student Competition

Honors Academy of TU/e

📅 Jun 2015 – Sep 2016   📍 Eindhoven

- Founded competition that has been running and growing substantially since then.
- Handled communications with international student teams and sponsors, website development and maintenance.
- Equivalent of 15 ECTS, assessment: *excellent*

Intro Committee

Study Association SvBMT Protagoras

📅 Nov 2014 – Sep 2015   📍 Eindhoven

- Organized the introduction program for the new first year's students.

TECHNICAL STRENGTHS

PyTorch | Keras | Python | MATLAB | LaTeX | C++ | Java | JavaScript | PHP | Git | Medical Image Analysis | Deep learning | Machine learning | Adobe Illustrator | Adobe Photoshop | MacOS | Linux | Windows

NON-PROGRAMMING* LANGUAGES

English (fluent) | Dutch (native) | German (basic)

*Although these days, such languages could be considered programming languages for large-language model interpreters.

HOBBIES AND INTERESTS

Running | Piano | Snowboarding | Chess | Cooking

REFERENCES

Prof. dr. ir. Clarisa Sánchez
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Dr. Mitko Veta
Eindhoven University of Technology supervisor during MSc
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