ARIANNE MEIJER QUANTUM COMPUTING RESEARCHER

I have two master's degrees in Artificial Intelligence (with cum laude distinction) and in Computer Science. I have obtained practical experience at many different companies and published two papers [4, 3].



PERSONALIA

Arianne Meijer

Espoo, Finland

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Married

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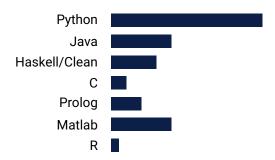
SKILLS AND TECHNOLOGIES

Relative expertise:



LANGUAGES

Relative expertise, in order of preference:



English (professional)

Dutch (native)

German (intermediate)

ACTIVITIES



I love to challenge myself both creatively and intellectually. I particularly enjoy combining established techniques in new ways. This can easily be seen in my crafts.

Or in the words of Spoonboy from the Matrix (1999): Do not try and think outside the box, that's impossible. Instead, only try to realize the truth... There is no box.



EXPERIENCE

08-2020 until 12-2020 University of Turku, Project researcher, Turku (Finland)

Researching quantum computing.

10-2019 until 04-2020 Cambridge Quantum Computing, Research Scientist, Cambridge (UK)

Working on t/ket> [3].

Radboud University, AI Master thesis, Nijmegen (NL)

04-2019 until 08-2019 : Investigated the use of deep reinforcement learning for compiling quantum circuits [2].

Grade: 9/10

Supervisors: Aleks Kissinger (RU), Johan Kwisthout (RU)

01-2019 until 03-2019 Radboud University, Teaching assistant Quantum Computing, Nijmegen (NL)

Researched a compiling technique for quantum computers and wrote an paper about it [4].

Radboud University, Teaching assistant, Nijmegen (NL)

01-2019 until 06-2019 : Helping students with exercises and grading them for various courses:

Combinatorics, Calculus & Probability Theory, and Representation & Interaction (Prolog).

Machine2Learn, Graduation Internship Computing Science, Amsterdam (NL)

06-2018 until 11-2018 Researched natural language generation in the form of a chatbot and

language style transfer [1].

Supervisors: Tom Heskes (RU), Wouter Oosterheert (Machine2Learn)

SIMON, Internship Artificial Intelligence, Eindhoven (NL)

09-2017 until 02-2018 : Created an automatic invoice processor. Grade: 8.5/10

Supervisors: George Kachargis (RU), Martha Larson (RU), Erik van Breusegem (SIMON)

08-2016 until 02-2017 Anchormen, Junior Data Scientist, Amsterdam (NL)

Worked on several Data Science and AI projects.

RadboudUMC, Graduation Internship Artificial Intelligence, Nijmegen (NL)

03-2016 until 08-2016 : Used kinship verification for syndrome diagnosis.

Supervisors: Marco Wiering (RuG), Jayne Hehir-Kwa (RadboudUMC),

Hamdi Dibeklioglu (TU Delft)

Atos, Graduation Internship Computer Science, Groningen (NL)

05-2015 until 08-2015 : Used text mining for predictive maintenance on Atos' computer network.

Supervisors: Michael Biehl (RuG), Marco Aiello (RuG), Mark Niemeijer (Atos)

09-2014 until 11-2014 Zernike College, Internship Computer Science Teacher, Haren (NL)

Taught computer science classes in high school (1/2 VWO and 4 havo/VWO).

EDUCATION

09-2016 until 08-2019 Master Artificial Intelligence, Radboud University, Nijmegen (NL)

Judicium: Cum Laude (i.e. graduated with distinction)

11-2015 until 06-2019 : Master Computing Science, Radboud University, Nijmegen (NL)

09-2013 until 01-2019 : Bachelor Artificial Intelligence, University of Groningen, Groningen (NL)

09-2011 until 10-2015 : Bachelor Computer Science, University of Groningen, Groningen (NL)

09-2011 until 06-2013 Bachelor Mathematics, University of Groningen, Groningen

Not graduated

PUBLICATIONS

[1] Arianne Meijer-van de Griend. Constrained quantum CNOT circuit re-synthesis using deep reinforcement learning. UN-PUBLISHED, Master thesis computing science. 2019. ResearchGate: RG.2.2.11886.77125.

[2] Arianne Meijer-van de Griend. *Natural language generation for commercial applications*. UNPUBLISHED, Master thesis Artificial intelligence. 2018. ResearchGate: RG.2.2.21953.10087.

[3] Arianne Meijer-van de Griend and Ross Duncan. "Architecture-aware synthesis of phase polynomials for NISQ devices". In: arXiv preprint arXiv:2004.06052 (2020). Presented at QPL 2020, virtual.

[4] Aleks Kissinger and Arianne Meijer-van de Griend. "CNOT circuit extraction for topologically-constrained quantum memories". In: Quantum Information and Computation 20.7&8 (2020), pp. 581–596.