Maurice Peemen

mauricepeemen@gmail.com
Mobile: (+31 641100679)

Current address
Schouwland 17
4891 DA Rijsbergen
the Netherlands

Personal information
Nationality: Dutch
Birth date: August 26, 1983
Sex: Male

OBJECTIVE

An employment opportunity in a Computer Science / Machine Learning related field.

EDUCATION

Eindhoven University of Technology Eindhoven, the Netherlands
PhD Electrical Engineering Thesis: "Improving the Energy Efficiency of Deep Learning"
Advisor: Prof. Dr. Henk Corporaal 2011-expected 2015

Eindhoven University of Technology Eindhoven, the Netherlands
Master of Science Electrical Engineering Graduated "cum laude"2007-2010

Fontys University of Applied Sciences Eindhoven, the Netherlands
Bachelor of Electrical Engineering Graduated 2004-2007

RELEVANT EXPERIENCE

Research Assistant - Eindhoven University of Technology 2010 - present
Electronic Systems Group

- Developed analytical models to optimize deep neural networks for data locality.
- Implemented an accelerator core to study the effects of our locality optimization.
- Studied the applicability of learning algorithms on CPU and GPU platforms.
- Supervised 5 master projects, and 6 internship projects.
- Guest Lectures: Loop transformations and code optimization, Neural Computer Architectures
- Lecturer: Logic Synthesis with ABC
- Teaching Assistant: Design of Complex Systems

Industry Funded Projects

Assembléon 2011-2013

- Developed a new vision based component teaching model for Pick & Place robots

SPITS project 2010-2011

- Developed a trainable speed sign detection and recognition model with GPU mapping

Internship - CNSE Albany, NY, USA 2007

- Automated a mask flatness metrology tool for EUV mask and chuck combinations

Resume Maurice Peemen (2)

COMPUTER SKILLS

- Rich experience in modeling and simulation, using MatLab, Mathematica
- Rich experience in code optimization: Assembly, SSE, AVX, NEON, OpenMP, GP-GPU with CUDA, Loop transformations for parallelism and/or data locality
- Experience in digital circuit design using VHDL for FPGA and ASIC
- Computer skills: Windows/Linux; HTML, LaTex; C/C++, OpenCV

LANGUAGES

- Dutch (native)
- English (good IELTS test overall score 7.5)
- German (basic)

PROFILE AND PERSONAL INTRESTS

- Willing to perform basic tasks and move on to solve complex problems
- Strong independent work style and excellent teamwork skills

- Likes to perform sports e.g., running and Judo

Since 2007 I am organizer of an officially registered Judo Tournament (Amerhaltoernooi), with an attendance of 600 athletes.

PUBLICATIONS

Lowering the Memory Wall for Convolutional Nets: A Dedicated Accelerator with Support for Layer Fusion and Recomputation, M. Peemen, L. Waeijen, B. Mesman, H. Corporaal (under review)

Inter-Tile Reuse Optimization Applied to Bandwidth Constrained Embedded Accelerators, M. Peemen, B. Mesman, H. Corporaal, DATE (2015)

A Data-Reuse Aware Accelerator for Large-Scale Convolutional Networks, M. Peemen, B. Mesman, H. Corporaal, NeuroArch Workshop, ISCA (2014)

Memory-Centric Accelerator Design for Convolutional Neural Networks, M. Peemen, A. Setio, B. Mesman, H. Corporaal, ICCD (2013)

Efficiency Optimization of Trainable Feature Extractors for a Consumer Platform, M. Peemen, B. Mesman, H. Corporaal, ACIVS (2011)

Speed Sign Detection and Recognition by Convolutional Neural Networks, M. Peemen, B. Mesman, H. Corporaal, International Automotive Congress (2011)