

## Workshop Program

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10:00 - 10:30 Welcome with coffee

10:30 - 10:45 Workshop Introduction by Ben van Werkhoven

10:45 - 12:30 Presentations

10:45 - 11:15 Trevor McDonell - A Functional Programming Language for GPUs

11:15 - 12:00 Valeriu Codreanu - Design and Performance Evaluation of a Commodity GPU Cluster for HPC and Deep Learning Workloads

12:00 - 12:30 Henk Dreuning - A Beginner's Guide to Estimating and Improving Performance Portability

12:30 - 13:30 Lunch

13:30 - 16:00 Presentations

13:30 - 14:00 Pieter Hijma - Optimization Effectiveness: A Case-Study in Relating Performance to Programming Effort

14:00 - 14:30 Sagar Dolas - Exploring the Potential of the ROCm Software Stack for High Performance Computing and Deep Learning on AMD GPUs

14:30 - 15:00 Maxwell Cai - GPU-accelerated Research in Astrophysics

15:00 - 15:30 Ehsan Sharifi Esfahani - A survey on Energy Efficiency in GPUs

15:30 - 16:00 Merijn Verstraaten - Mix-and-Match: A Model-driven Runtime Optimisation Strategy for BFS on GPUs

16:00 - 17:00 Drinks, Snacks & Networking

# 5<sup>th</sup> NIRICT GPU Workshop

December 4, 2018  
Utrecht, the Netherlands



Started in December 2015 as the *NIRICT GPGPU Reconnaissance project*

Goal is to understand the breadth and depth of GPU Research in the Netherlands

Brings together researchers in GPU Computing and software developers of GPU applications to exchange experience and ideas, and foster new collaborations

December 2015: Kick-off meeting

October 2016: 1<sup>st</sup> Workshop, theme “Support systems for GPGPU programming”

June 2017: 2<sup>nd</sup> Workshop, theme “GPU Applications”

November 2017: 3<sup>rd</sup> Workshop, theme “GPUs and program analysis”

March 2018: acquired funding for 3 more workshops and one tutorial

May 2018: 4<sup>th</sup> Workshop

December 2018: 5<sup>th</sup> Workshop

### 5<sup>th</sup> Workshop organizers

- Marieke Huisman (University of Twente)
- Anton Wijs (Eindhoven University of Technology)
- Ana Varbanescu (University of Amsterdam)
- Sven Warris (Wageningen University)
- Ben van Werkhoven (Netherlands eScience Center)

### Supported by

- Mohsen Safari (website and mailinglist)
- Ida den Hamer (venue and financial matters)



Stay informed on future events!

The image shows a screenshot of a web browser displaying a contact page. The browser's address bar shows the URL `fmttools.ewi.utwente.nl/NIRICT_GPGPU/contact.html`. The page has a dark background with the title "Join Us" in white. A navigation menu at the top right includes links for "Home", "Events", "People", and "Join Us". The "Join Us" link is circled in red, with a red arrow pointing to it from the top right. Below the navigation is a large image of a green and blue grid structure. Underneath the image is a form titled "Join our mailing list." which is also circled in red. The form contains three input fields: "E-mail:", "First Name:", and "Last Name:". A blue "Send" button is located at the bottom right of the form. A second red arrow points from the bottom left towards the form area.

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