

# State of the LOCOS

September 2023

Wim Vanderbauwhede

locos (*noun*):  
lunatics

**Looking back**

# Theme activities in the past year

- Learning and teaching
- Research
- Projects
- Outreach
- New members

# Learning and teaching

# L&T-related activities

- Lauritz became the School's Sustainability Subject Advisor.
- Thanks to Matt (and Derek, and Waqar), the GA became the first UoG programme with Sustainability Aims and ILOs
- Lauritz has now finished the implementation of Aims and ILOs for all of the School's Hons/MSci undergraduate programmes, thanks to Tim, John W and Phil
- More colleagues are incorporating sustainability into their course materials. Ask Lauritz or me if you need advice.

Research

# Other research-related activities

- Glasgow Carbon-Conscious Computing (GC3) lab
- Anyone else?



# Research-related activities

- Last year's seminar series had 16 speakers
- Tim convinced Barclays to fund to Sustainability-related PhDs
- Colin co-organised the 1st IAB/IETF workshop on “Environmental Impact of Internet Applications and Systems”
- Lauritz is leading a LOCOS team on a book chapter “Energy-Aware Workflow Execution”

# Projects and proposals

# Research projects and proposals

- UKRI DRI Net Zero Scoping Project (Ole, me)
- EPSRC CDT bid “Computing and Electronics for a Sustainable Society” (failed)
- EPSRC call “Research for a digitally enabled circular economy and sustainable digital technologies” (outline stage)

# Other projects and proposals

- Anyone, anything?

# Outreach

# Outreach

- Laura and Waqar starred in a media campaign to promote LOCOS, in collaboration with the BCS.
- In total, 30,000 views, 60,000 impressions

```
man_kernel_top.v X
166 .w { w[31:0] }
167 .valid { valid_cursoris_heri_subbert_0 }
168 .ready_0 { ready }
169 .w { w { local_0 } }
170 .invalid_0 { valid_cursoris_heri_0 }
171 .ready { ready_from_cursoris_heri_subbert_0 }
172 .y { y { buff2_0 } }
173 .valid_y { valid_y { buff2_0 } }
174 }
175
176 kernel_top_cursoris_heri
177 kernel_top_cursoris_heri_0_0 (
178   .clk { clk }
179   .rst { rst }
180   .w { w { local_0 } }
181   .valid { valid_cursoris_heri_0 }
182   .ready_0 { ready_w { local_0 } }
183   .w { w { local_0 } }
184   .ready_w { ready_w { local_0 } }
185   .y { y { [31:0] } }
186   .invalid_y { invalid }
187   .ready { ready_cursoris_heri_0 }
188   .w { w { [31:0] } }
189   .valid_y { invalid }
190 }
191
192
193 kernel_top_w
194 kernel_top_w_0_0 (
195   .clk { clk }
196   .rst { rst }
197   .w { w { w[31:0] } }
198   .valid { valid_w { w_0 } }
199   .ready { ready }
200   .w { w { local_buff1_0 } }
201   .valid_0 { valid_w { local_buff1_0 } }
202   .ready { ready_from_w_0 }
203 }
204
205 kernel_top_w { local_buff1
206 kernel_top_w { local_buff1_0_0 (
207   .clk { clk }
208   .rst { rst }
209   .w { w { local_buff1_0 } }
210   .valid_0 { valid_w { local_buff1_0 } }
211   .ready_0 { ready_w { local_buff1_0 } }
212   .w { w { local_w } }

```

# Other outreach

- Anyone, anything?



# LOCOS

## lecturers

# Lectures in Low Carbon and Sustainable Computing

- Nikela Papadopoulou and Paul Harvey will join the School in the new year, as the School's first lecturers in Low Carbon and Sustainable Computing

**Looking forward**

# Plans

- Finish what we started
- More speakers
- More LOCOS research please
- Thoughts, ideas?

**Thank you!**