



System-wide IO monitoring at ARCTUR

Tomislav Šubić

- Located in Nova Gorica, Slovenia
- 27 employees
- HPC provider and consulting
- Currently on 4 EU projects
 - (3 successfully finished)



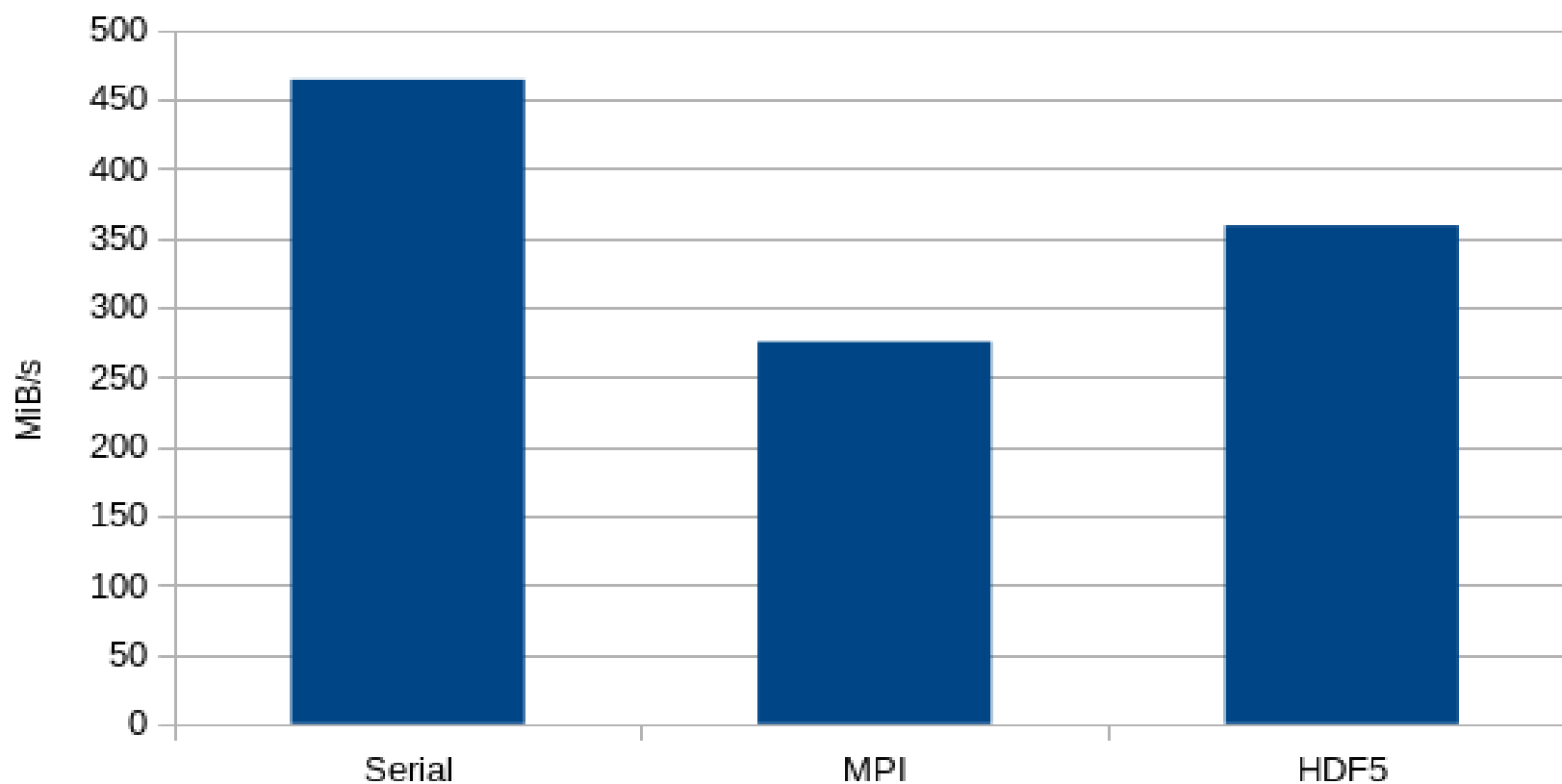
- Built by Sugon
- 1000+ cores
- 32 Nvidia Tesla M60
- 8 big memory nodes with 1TB RAM
- /home is on a 20TB NFS on SSD disks



System wide monitoring

- Ganglia on Arctur-1
- Telegraf + InfluxDB on Arctur-2
- Grafana for visualisations

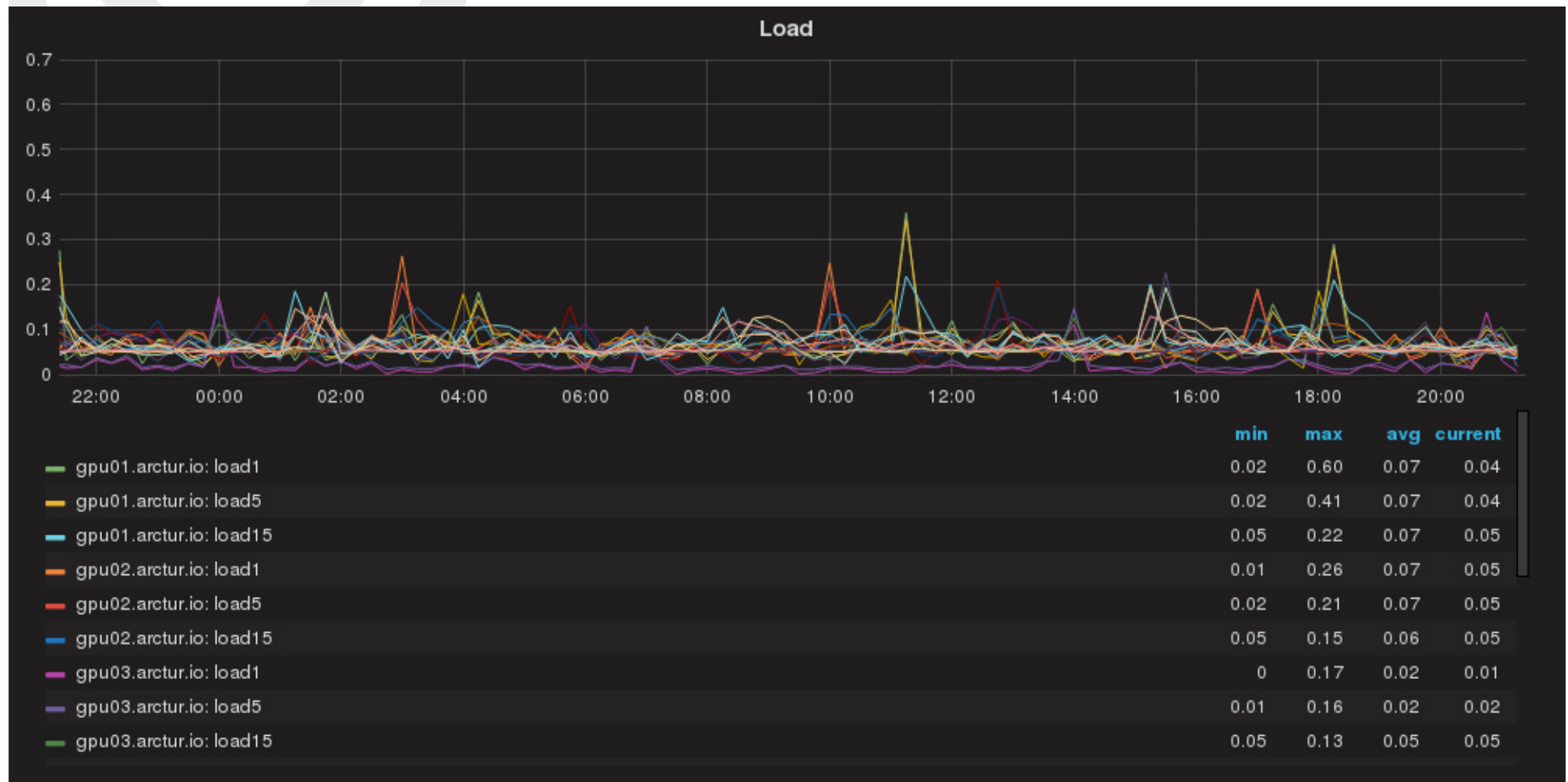
Average write of a 16MiB file on Arctur-2 NFS



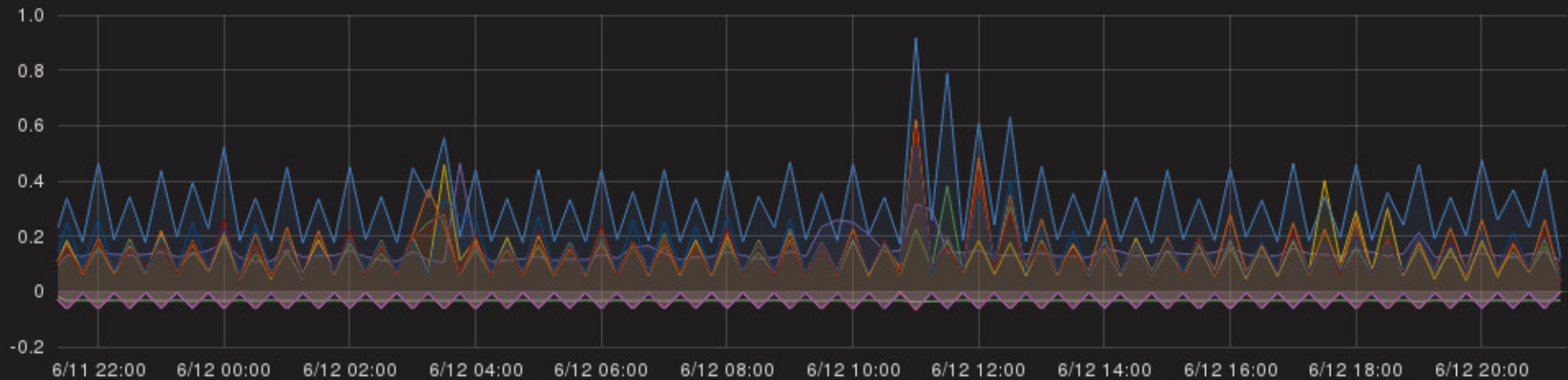
Training a neural network (1/2)



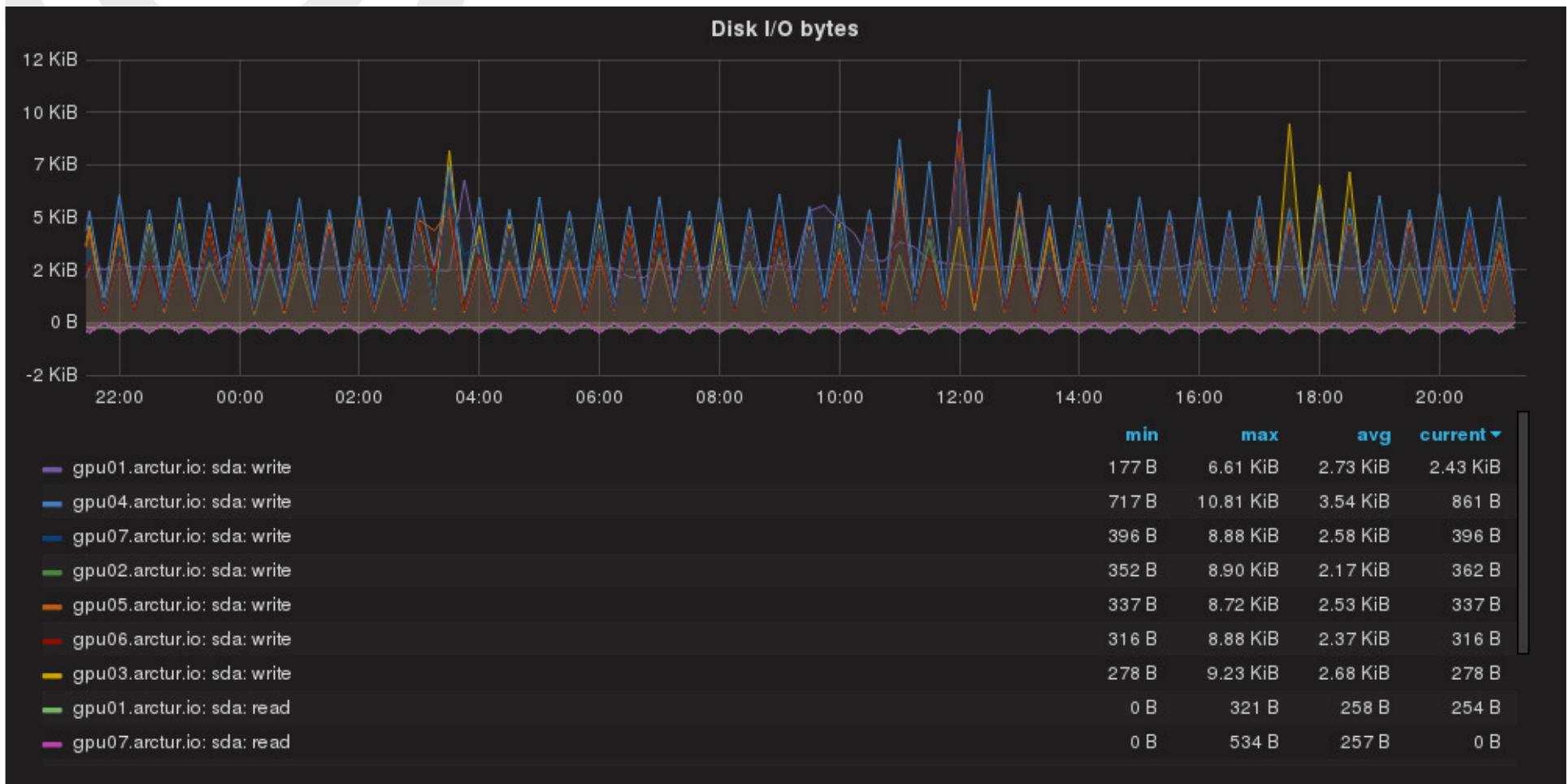




Disk I/O requests



	min	max	avg	current ▼
gpu04.arctur.io: sda: write	0.12	0.92	0.31	0.12
gpu01.arctur.io: sda: write	0.07	0.46	0.14	0.11
gpu07.arctur.io: sda: write	0.05	0.53	0.15	0.05
gpu05.arctur.io: sda: write	0.04	0.62	0.15	0.04
gpu02.arctur.io: sda: write	0.04	0.42	0.13	0.04
gpu03.arctur.io: sda: write	0.04	0.61	0.14	0.04
gpu06.arctur.io: sda: write	0.04	0.59	0.14	0.04
gpu01.arctur.io: sda: read	0.01	0.04	0.03	0.03
gpu07.arctur.io: sda: read	0	0.06	0.03	0





- <https://arctur.si>

tomislav.subic@arctur.si