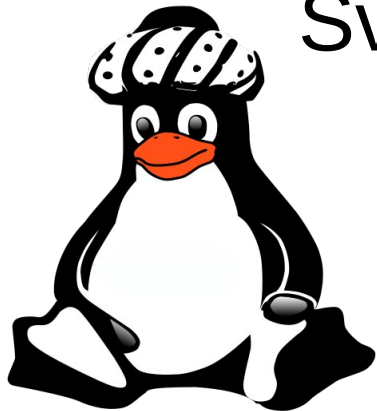


Dan slobode računalne grafike i računanja na grafičkim procesorima 2018

dr. sc. Vedran Miletić, Odjel za informatiku
Sveučilišta u Rijeci, vedran.miletic.net



HULK-Ri/InfUniRi OpenClass
Sveučilišni kampus Trsat, **20.12.18.**



Meta OpenClass

OpenClass

- Zajednički projekt
 - Riječke podružnice Hrvatske udruge Linux korisnika
 - Odjela za informatiku Sveučilišta u Rijeci
(ResearchClass, BusinessClass, StudentClass)
- Cilj: održavanje redovitih seminara o slobodnom softveru otvorenog koda

OpenClass jučer i danas

- 2009. započeo, 2010. dobio ime
- Predavanja ili događaji **svakih dva tjedna**
- Teme: Fedora, Ubuntu, OpenStreetMap, NumPy, InstallFestovi, obilježavanja Dana slobode dokumenata 2015, 2013, 2012, 2011, LibreOffice 3.3 release party, ...

Vedran Miletić

- Diplomirao matematiku i informatiku (UniRi)
- Doktorirao računarstvo, računalne mreže (FER)
- Postdoc računalna kemija (Heidelberg, DE)
- Interesi: superračunala, grafički procesori, računalne simulacije, slobodni softver otvorenog koda

Snimanje predavanja

- „Best effort” snimanje i objava
- Ranije snimke
 - Savršena oluja (2014.)
 - Ratovi web preglednika (2015.)
 - Dan slobode dokumenata 2015.

Kraj meta OpenClass

AMD do 2015.

- „~~Best~~Average effort” podpora za Linux
 - Radeon R300
 - Radeon R600
 - HD 3650, HD 6770
 - Radeon SI
 - Release date support, salvaged Kaveri APU

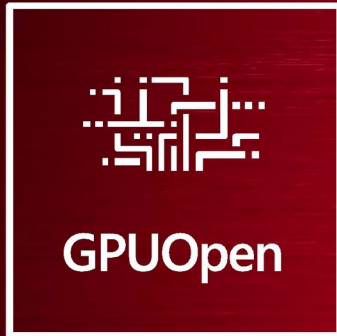
2014. na konferenciji DORS/CLUC



A tada, rujan 2015. godine...



15. prosinca 2015. GPUOpen



The Solution: GPUOpen

Direct Access

Unprecedented GPU Control

Open Source Software

Large collection of effects, tools, libraries & SDKs

Industry Standards

Invite participation from industry leaders

GPUOpen 1/2

- AMD-ov softver postaje (uvelike) FOSS
- Autori PC igara imaju pristup bibliotekama koje mogu koristiti, razvijaju kao za konzole



New Compressorator 3.1 SDK for seamless integration into asset toolchains – and more!

Posted on November 21, 2018 by Navin Patel

🔗 3D mesh, Compressorator, Linux, mesh optimization, Vulkan

Vulkan®

Vulkan Memory Allocator 2.2

Posted on December 18, 2018 by Rys Sommfeldt

🔗 allocator, memory, open source, tools, VMA, Vulkan

GPUOpen.com

GPUOpen Portal

- ▶ Portal to access Open Source content
- ▶ Blog posts / industry updates
- ▶ Open Source content hosted on GitHub

GitHub

Open source?

What Does "Open Source" Mean?

- ▲ Open means Open Source for RTG software – no nonsense!

MIT License

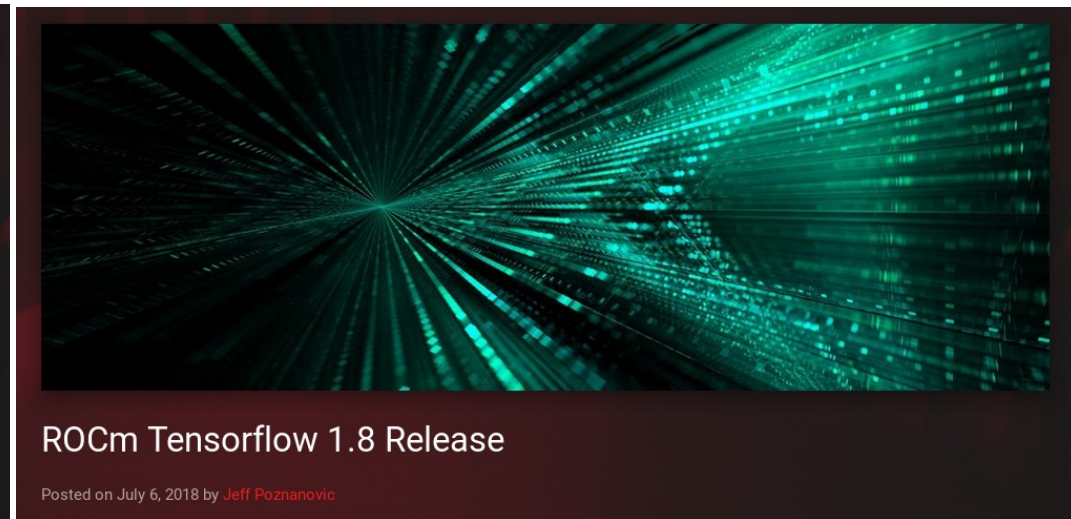
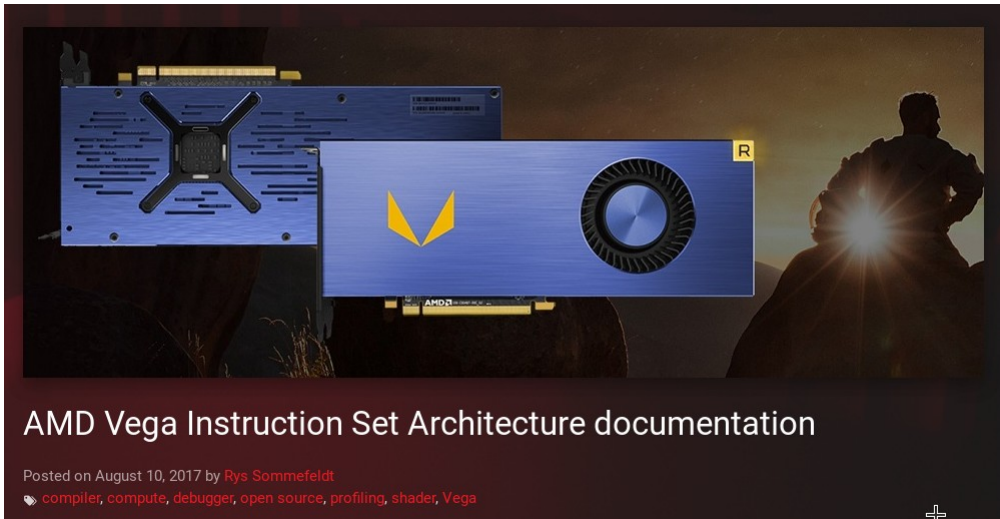
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The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

GPUOpen 2/2

- Biblioteke za znanstveno računanje
- Upravljački programi za Linux: kernel, Direct Rendering Manager, Mesa, LLVM



2016: OpenGL 4.3, 4.4, 4.5



Vulkan



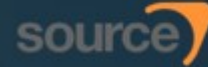
- Vendor-agnostic
- AMD, ARM, Broadcom, ImgTec, Intel, NVIDIA, Qualcomm
- Konkurencija DX12

Vulkan

- Valve, Sony, Nintendo, Bethesda, Codemasters, Croteam/Devolver, Sega, Square Enix...

Engines

Looking to take your game to the next level? Look no further: Here are several game engines that currently support Vulkan.



Vulkan: Erste Benchmarks der neuen API in Talos Principle

16.2.2016 18:50 Uhr | Wolfgang Andermahr

176 Kommentare



Bild: Matthias Hiltner

Das ging aber schnell: The Talos Principle ist das erste Spiel, das die neue Vulkan-API unterstützt. Neben Vulkan kann das Spiel ebenso etwas mit DirectX 9, DirectX 11 und OpenGL anfangen. ComputerBase hat erste Benchmarks durchgeführt.

RO90omga8D4




Današnji dan

- Dan po uzoru na Dan slobode dokumenata, Dan slobode hardvera, Dan slobode softvera
- Cilj: podizanje svijesti o i slavljenje širenja otvorenosti u softveru i hardveru za računalnu grafici i računanje na grafičkim procesorima

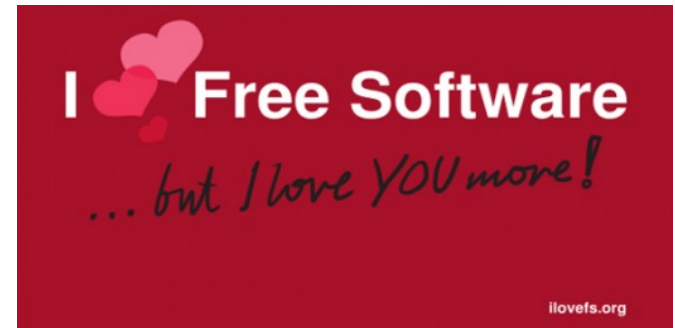
./ Graphics and Compute Freedom Day (GCFD)

Celebrating and raising awareness of open standards, technologies, software, and hardware in graphics and compute.

 [View on GitHub](#)

OpenClass sutra

- 17. siječnja **u dogovoru** *Sustavi otvorenog koda za continuous integration*
- 31. siječnja **možda** *IBM kupio Red Hat, a mogli su ga skinuti besplatno pod imenom CentOS*
- 14 veljače Valentinovo #ilovefs
- 28. veljače ? (Zulip, web, FB)



HULK

- Zulip: <https://hulk.zulipchat.com/>
- Web: <https://www.ri.linux.hr/>
- Facebook: <https://www.facebook.com/linux.hr/>