

David J. Young

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<http://davidjyoung.com/images/PUBLICATIONS.pdf> [DBLP](#)  
[Mainframe](#) to [Multimedia](#) to [Mobile](#) to [Machine Learning](#)

Performance labs (AmPEC, HP Performance COE, AMD Datacenter GPU) setup and administration, analyzing server, storage, network, PCIE (Gen4) and GPU performance for Big Data, Machine Learning, and HPC for higher education and the world's largest corporations: ***Papers I wrote with colleagues helped sell billions of dollars of hardware and software for Amdahl/Fujitsu, Hitachi Data Systems, Oracle, HPE, and AMD.*** Representative, repeatable, scalable Machine Learning, HPC, Big Data, Multimedia & Mobile workloads with sub-second response times, from megabytes to petabytes & one user to thousands, for QA, problem re-creation, and competitive analysis.

#### SKILLS:

**Performance Engineer** – ML\HPC\Big Data on AMD/Intel/Nvidia/IBM, AWS, GCP, VMWare, LUW, OSX, IOS, z/OS  
**Knowledge Base Development** – JIRA, Confluence, Moodle, Camtasia, Captivate, Premiere, Visio, Office, Pro Tools  
**ML/AI/VR/GPU** – [Profiling GPU/CPU Performance](#) [AMD SuperMicro Deep Learning Solution](#)  
**Big Data Admin** – [Spark](#), [Kafka](#), [Hadoop](#), [Vertica](#), [Big Query](#), [Couchbase](#), [MongoDB](#), [DB2](#), [Oracle](#), [SQL Server](#), [MySQL](#)  
**Docker Container development** - <https://hub.docker.com/u/djydockerhub>  
**Mobile** – java, c++ ([Android Studio/Windows 8.1](#)) swift 3.0 ([Xcode/Instruments 8.3, OSX 10.12, IOS 10.3](#))  
**Technical Writer** – Office, [iWork for iCloud](#), Acrobat, [Framemaker](#), [DITA](#), [XMetaL](#), JavaHelp, Ant, Visio, Doxygen  
**z/OS Sysprog & capacity planner** – IPCS, SMPE, SMS, VTAM, JES2, RMF, SAS, [MXG](#), [DB2](#), [CICS](#), [IMS](#), Zeke [djygithub](#)

#### EXPERIENCE:

##### **Senior Performance Engineer Davidjyoung.com 3/2016 – now**

**Intel oneAPI-dpcpp and Nvidia-nvcc Matrix Multiplication** - <http://davidjyoung.com/cm/g/oneAPI.pdf>  
**Intel I7/Nvidia vs AMD Ryzen/Radeon: Power & Performance** - <http://davidjyoung.com/cm/g/amdvintelnvidia.ll.pdf>  
**Jmeter, Loadrunner, Vertica, Vmware Demo** - <http://davidjyoung.com/cm/g/pearsonloadrunnerjmeter/>  
**Profiling, Debugging GPU and CPU Performance** <http://davidjyoung.com/cm/g/nvidiaagpuperf.pdf>  
**Intel I7/Nvidia vs AMD Ryzen/Radeon: Selected Workloads** - <http://davidjyoung.com/cm/g/amdvintelnvidia.pdf>  
**Spark/SSD Sizing: Real, VMWare, GCP Dataproc, TensorFlow** - <http://davidjyoung.com/cm/g/hdfssparksizing.pdf>

##### **PMTS S&A Software Engineer – AMD Datacenter & Embedded Solutions Group 3/2018 – 7/2020**

Project Managed Rocm Validation Suite from offshore development thru AMD/QA acceptance, performance, regression, and integration testing <https://github.com/ROCM-Developer-Tools/ROCMValidationSuite/issues/429> . Partner/Customer support (Dell, HPE, SuperMicro, Penguin, Inventec, Facebook, Google, University of Michigan, North Eastern University, Higher School of Economics, Moscow). Multi-GPU multi-node Machine Learning (Tensorflow, Pytorch, Caffe) and HPC (gromacs, lammmps/kokkos, hoomd-blue, HPL) GPU lab setup, debug, and performance analysis (standalone and docker) on Windows and Linux (Ubuntu, RedHat, Centos) using Intel, Nvidia, and AMD/ROCM technology. Python/C++/CUDA/Hip tool development and debugging with VTUNE HPC Performance Analysis, strace, nvprof,nvidia-smi, rcpof,rocm-smi, perf, pcm, numactl and nmon. Vertica cluster stress testing. Knowledge base maintenance with JIRA, Confluence, MS-Office, Acrobat, Camtasia, Visio, Premiere, Pro-Tools. <https://github.com/djygithub/craydgemm>  
<https://github.com/pytorch/pytorch/issues/20969> <https://github.com/lammmps/lammmps/issues/2040>

##### **Principal Technical Support Engineer HP Big Data 9/2011 – 3/2016**

Big Data/MPP Cluster performance, scalability, and QA (AWS/VMWARE/GCP) running Vertica & Hadoop (Hortonworks, Cloudera). Award winning (6) customer and product support (SalesForce), problem recreation and resolution (JIRA), distance learning, lab setup. Performance Center of Excellence, Enterprise Servers, Storage & Networking. Knowledge base maintenance (Confluence, Camtasia, PowerPoint, Acrobat), troubleshooting methodology, online video production (Premiere Elements). Open source research (NMON, JMeter, OpenLDAP, unixODBC, OpenJDK, OpenMP, HPCToolkit).  
**Vertica Performance Engineering Essentials** - <http://davidjyoung.com/cm/g/vpee.pdf>

##### **z/OS Performance Specialist – University of California Office of the President 1/2010 – 6/2010**

Executive summary reporting, including analysis of multi-tier, distributed PAYROLL/BENEFITS performance and license costs (SCRT) for UC campuses and 170,000 employees (SYSPLEX, WEBSPIHERE, JAVA, DB2, CICS, DDF, BATCH). SAS/MXG report generation, WLM enhancements, SAS 9.2/MXG 28.01 installation, debug, and maintenance, operations and application development support and documentation, new application sizing. <http://davidjyoung.com/cm/g/alloft.pdf>

##### **Senior Technical Writer – Serena Software 9/2007 – 10/2009**

2,000 pages of written documentation (Framemaker, MS-Office, Acrobat, DITA, Visio, Photoshop) for ChangeMan ZMF/ZDD, including videos (Camtasia and Captivate). z/OS Subject Matter Expert (IMS/CQS, CICS/TS, DB2 V6,7,8,9), z/OS 1.8/1.9. SOAP, USS, HFS research and development. <http://davidjyoung.com/cm/g/zmfwritingsamples.pdf>  
<http://davidjyoung.com/cm/g/zmfivp.pdf>