Sam Winborn Gwydir

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SKILLS C C++ Go Bourne-Shell Ansible Python Emacs-lisp LATEX

Public Speaking

EDUCATION Texas A&M University College Station Texas USA

May 2017

Bachelor of Science in Computer Engineering, Computer Science

Minor in Mathematics

EXPERIENCE

Joyent, Inc. San Francisco California USA

SmartOS FreeBSD Linux ZFS Postgres C Go Dtrace mdb

June 2017 - Present

- Implemented "hot-inlining" CPU feature toggling to defeat class of attacks (OS-6239)
- Improved memory deallocation by 100,000x to improve Postgres performance (OS-6390)
- Patched Postgres to use Intimate Shared Memory for more effective virtual memory usage (MANATEE-371)
- Fixed long standing post-mortem DTrace bug in hypervisors (OS-5927)
- Participated in new OS bring up and testing (FreeBSD & Linux)

Groupon Palo Alto California USA

June 2016 - June 2017

FreeBSD ZFS MySQL Postgres Jenkins Poudriere R Ansible Shell

- Systems Engineering intern at Groupon working with FreeBSD-based database hosts
- Documented and indexed all FreeBSD information across internal services
- Benchmarked FreeBSD releases and driver and firmware for performance regressions under database workloads
- Worked with a contractor at Gainframe to update host provisioning
- Upstreamed several of Groupon's FreeBSD ports, and a small fix to crontab
- Attended and talked at FreeBSD conferences
- Debugged system and processes crashes

Speaking

Improving Netdump Performance with iflib BSDCan 2018 AsiaBSDCon 2018

• Improved Netdump performance by 1.7x in ideal conditions

Participating in Open Source Software Horizon School of Technology

• Q&A with students covering open source software and stories

The History and Future of Core Dumps in FreeBSD

vBSDCon 2017 BSDCan 2017 AsiaBSDCon 2017

- History of core dump feature in BSD and later FreeBSD, illumos and Mac OS X
- Detailed diagrams, feature list and descriptions of core dump procedure

Github github.com/gwydirsam