Shaun Michael Verch

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Work Experience

Site Reliability Engineer, Planetscale — January 2019 - Present
- Deployed Kubernetes infrastructure for a multi-cloud database as a service
- Connected monitoring and trained team in incident response
- Defined production readiness, ensured clear product status communication

Creator, Cloudless — July 2018 - Present
- Created Cloudless, a prototype for low level cloud portable deployment
- Deployed https://shaunverch.com, https://getcloudless.com using Cloudless

Site Reliability Engineer, U.S. Digital Service — July 2016 - July 2018
- Created roadmap to safely update 17 years of legacy code
- Identified and remediated hundreds of critical security vulnerabilities
- Launched login.gov on AWS, Terraform, and Chef, now supporting 5 million users
- Supported quiet launch of qpp.cms.gov across 6 remote DevOps teams

Site Reliablility Engineer, URX — August 2014 - April 2016
- Designed and implemented a fully replicated multi-master datacenter setup
- Managed 5+ engineers and 30+ services in zero downtime datacenter upgrade
- Created lock free high performance persistent crawler queue

Database Systems Engineer, MongoDB — August 2012 - June 2014
- Core maintainer, wrote "willitlink" to fix massive dependency problems

Storage Engineering Intern, NetApp — June-August 2011, 2012
- Wrote automation and enhanced SCSI support for NetApp disk arrays

Education

B.S. in Mathematics / Computer Science - Brown University, Providence, RI
M.Sc. in Computer Science - Brown University, Providence, RI

University Coursework

Computer Security, Operating Systems, Computer Networks, Algorithms, Programming Languages, Embedded Microprocessor Design, Multiprocessor Synchronization, Abstract Algebra, Real Analysis, Complex Analysis, Number Theory, Cryptography

University Projects

Weenix - Implemented small Unix-like OS and ported from Xen to x86 emulator
Capriccio Threads - Experimental work on light weight userspace threads library
TCP over UDP - Implemented the TCP/IP protocol using UDP as link layer

Teaching Experience

Conference Talks:	OSCON, MongoDB Days, Scale 11x, NoSQL Now
Online Class:	M101JS: MongoDB for Node.js developers
Teaching Assistant:	Operating Systems, Computing, Multivariable Calculus

Software Experience

Languages:	C, C++, Intel x86 assembly, MIPS assembly, Bash, Perl, Python, Ruby, Java, Scala, Golang, Rust, Javascript, PHP
Operating Systems:	Linux, FreeBSD, MacOS
Datastores:	MySQL, Vitess, MongoDB, Kafka, Elasticsearch, HBase, HDFS, Ceph, Zookeeper
Data Processing:	Hadoop Mapreduce, Apache Spark
Operations:	AWS, GCP, Ansible, OpenVPN, Bind DNS, LDAP, sssd, Apache Mesos, Jenkins CI, Chef, Terraform, Kubernetes