DAN STROMBERG

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SOFTWARE DEVELOPER
Produce Innovative, Reliable Solutions that are Low in Nonessential Complexity

Resourceful, solutions-focused, precise Programmer with years of success leveraging Python and other languages to design scalable applications and secure object-oriented structures. Outstanding organizational, problem-solving, and communication skills. Adept at breaking projects into manageable sections, working independently and in teams, and delivering superior results on schedule. Noted for thorough error checking that facilitates rapid, on target bug diagnosis.

- **Algorithmic Analysis**	- **Data Extraction**	- **System Administration**
- **QA & Admin Process Automation**	- **Build Systems & Environments**	- **Test Development & Execution**
- **Requirements Analysis**	- **Documentation**	- **Troubleshooting**

TECHNICAL PROFICIENCIES

Programming: CPython / Pypy / Jython, sh / ksh / bash, C, FORTRAN, PowerShell, C++, Java, Ada, Modula 2, Lisp, Prolog, Assembly (6502, 8088, 80286, 360), SQL

Platforms: Linux (Mint, Debian, Fedora, Redhat Enterprise, Ubuntu, CentOS, openSUSE, SLES), UNIX (Solaris, AIX, IRIX, Tru64, MacOS), Android, Windows

Databases: MySQL, DATAllegro, Ingres, GDBM, NDBM, Berkeley DB, Sybase, MS SQL Server

Networking: TCP, UDP, Berkeley sockets, REST over http, tshark / wireshark, 10BASET, 100BASET, 1000BASET, Infiniband

Tools: Elasticsearch, Redis, Celery, Tornado, gevent, AWS S3/EC2, JSON, mypy (PEP484), pylint, snakefood, Sphinx, epydoc, nose, pytest, docker, pyreverse, Subversion, Git, Git-SVN, Trac, Salesforce, Rally, JIRA, Gitlab, Graphviz, LibreOffice, rsync

PROFESSIONAL EXPERIENCE
CONTRACT: MINDLANCE (VMWARE)   December 2020 — January 2021

Python Developer
- Worked on internal software for monitoring VMware vCenter instances.
- Played a significant role in design of REST API.
- Coded and tested said API.
- Used Python 3, Flask, Gunicorn, Nginx, JSON, YAML, requests, Graphviz.

CONTRACT: OXFORD CORP. (ORANGE MED) Remote (Santa Ana, CA)
                                                    May 2020 — September 2020

Python Developer
- Worked on a data extraction application for embedded data in a ventilator product.
- Used Python 3, pyserial, TCP and UDP sockets, statemachine, JSON.

FULL TIME: GROKSTREAM INC., Aliso Viejo, CA   **May 2019 — March 2020**

Junior Python Developer

- Ported product from Python 2 to Python 3 (except a portion which I was instructed to avoid).
- Set up a coverage report including the product REST API.
- Automated previously-difficult product test environment setup, and parallelised it.
- Moved product from Elasticsearch 6.8 to 7.3.
- Wrote a product installer.
- Introduced statistical analysis of automated tests.
- Used Python3, Python2, Falcon, Docker, JSON, microservice architecture.

FULL TIME: CYLANCE INC., Irvine, CA   **February 2016 — April 2017**

Senior Python Developer

- Worked on internal SOA applications that facilitated malware analysis.
- Added download facility to REST API that allowed researchers to retrieve malware-related data.
- Set up automatically-generated Sphinx documentation, increasing developer understanding of code.
- Improved code quality through bug fixes, pylint, and unit tests.
- Used Python 2, AWS (EC2 and S3), Tornado, Django, Redis, RabbitMQ, MySQL, Sphinx, JSON, microservice architecture.

CONTRACT: SELECT GROUP (INTUIT), San Diego, CA   **February 2015 – May 2015**

Python Developer

- Built numpy and scipy as wheels using pip and Jenkins that automated dependency generation.
- Integrated pylint and pep8 into Jenkins Continuous Integration builds that instituted code style.
- Modified existing code to do Splunk queries in large chunks, improving application performance.
- Improved test coverage through unit tests that increased code quality.
- Used Python 2.

CONTRACT: STROMBERG SOFTWARE CONSULTING (SOTERA WIRELESS), San Diego, CA
May 2014 – July 2014

Python Developer

- Worked with Django (for logging hospital/device status reports), SecureLink, Fabric.
- Used Python 2.

CONTRACT: STROMBERG SOFTWARE CONSULTING (SUPER CARE MEDICAL), Downey, CA
January 2014 – December 2014

Python Developer

- Wrote XML divider and modifier, enabling business-related faxes easier to process.
- Modified E-mail attachment download script that logged to MS SQL Server, increasing visibility into fax operations.
- Coded business-to-business (B2B) file upload / download / summarization project that improved inter-business data transfer.
- Used Python 2, xmltodict.

CONTRACT: ROBERT HALF (RESEARCH AFFILIATES), Newport Beach, CA
October 2012 – October 2012

Python Developer
- Wrote new code and documented old code.
- Wrote a new logging module.
- Documented Russell-related portfolio creation.
- Used Python 2.

FULL TIME: GAIKAI, Newport Beach, CA   **June 2012 – August 2012**

Python Developer
- Wrote new code and maintained old code.
- Renovated fundamental building block code to eliminate potential for race conditions.
- Tracked down a vital process hang to a threading bug in CPython 2.6.x.
- Used Python 2.

CONTRACT: PROTINGENT (TERADATA), San Diego, CA   **January 2012 – April 2012**

Python Developer
- Ported Backup Software Installer to SuSE Linux Enterprise Server (SLES), increasing number of operating systems supported by backup product.
- Performed bug fix for race condition resulting from code not handling restartable system calls, improving software reliability.
- Increased maintainability of Backup Software Installer through use of pylint.
- Used Python 2.

FULL TIME: A2Z, Irvine, CA   **September 2011 – October 2011**

System Support Representative
- Provided internal support on Linux systems, troubleshooting issues and ensuring continuing operations with minimal downtime.
- Assessed and vetted internal Message Queue system in preparation for winter holidays, facilitating ability to handle higher workload over this period.
- Diagrammed complex network-based software system using Python and Graphviz that increased understanding of said software.
- Used Python 2.

CONTRACT: NELSON TECHNOLOGY(DREAMWORKS), Glendale, CA
December 2010 – December 2010

Python Developer
- Worked on internal artifact archival system.
- Used Python 2.

CONTRACT: SAPIENT & CLARITY (RESEARCH AFFILIATES), Newport Beach, CA
August 2010 – November 2010

Python Developer

- Worked onsite at Research Affiliates (on contract through Clarity and Sapient) writing Python code for portfolio design, enabling wider range of process automation than possible with prior Excel and SAS coding.
- Collaborated with project manager and end user to gather requirements. Served as project's sole developer, driving design, implementation, and testing of high-quality CPython code that streamlined portfolio design.
- Wrote unit, integration, and system tests. Tracked code changes, enhancements, bugs, and tasks, and generated documentation.
- Used Python 2.

CONTRACT: PINNACLE (HEWLETT PACKARD), San Diego, CA   **April 2010 – June 2010**

Python Developer

- Sole developer of Python development project supporting HP's build environment.
- Leveraged XML and YAML to automate flowing check-ins from n branches to m branches; handled internal design and prepared extensive documentation.
- Advised management on strategies designed to significantly improve reliability and efficiency of source control service.
- Used Python 2.

CONTRACT: STROMBERG SOFTWARE CONSULTING (BIRCHSTREET), San Diego, CA
December 2009 – January 2009

Python Developer, Technical Writer

- Recruited by IT Director to investigate chronic system issues for global provider of business solutions following loss of previous internal process expert; documented internal processes and avoided need for expensive rediscovery.
- Eliminated monitoring protocol as source of spurious alerts by switching host's Nagios monitoring from check_nt to check_nrpe.
- Fixed Oracle script bug that reduced effectiveness of system removal of empty directories.
- Used Python 2.

CONTRACT: STROMBERG SOFTWARE CONSULTING (QUASAR), San Diego, CA
September 2009 – December 2009

Python Developer

- Led design of Python application to Windows XP for leader in noninvasive biosensing systems.
- Established both primary and alternative methods for interpreting variety of SD card formats containing binary data; wrote code for formatting and consuming cards for Quasar's latest product.
- Used Python 2.

TRANSITIONAL ASSIGNMENT, POST-ACQUISITION: MICROSOFT, Aliso Viejo, CA
August 2008 — August 2009

Systems Engineer / Devops

- Played key role on transitional team that facilitated Microsoft acquisition of DATAllegro in 2008. Overcame unfamiliarity of Windows products and deftly navigated complexities of Windows security model while working with system administration automation technologies that included Windows Server 2008, PowerShell V2, SQL Server 2008, Active Directory, and Windows Failover Clustering.

- Completed high-value projects that automated processes such as configuring Active Directory, installing PowerShell and WinRM 1 machine at a time as prerequisite to other automated processes, and installing SQL Server on n machines in parallel.

- Teamed with Q/A personnel, providing valuable support for ensuring solutions met requirements of new customer.

- Used PowerShell, Python 2, Linux Shell.

FULL TIME: DATALLEGRO, Aliso Viejo, CA   **August 2007 – August 2008**

Systems Engineer / Devops

Earned rapid promotion at startup database appliance manufacturer to design and maintain Python 2 and Bash scripts for diverse software needs. Built parallel Ingres database installer and automated previously ill-defined build processes. Tagged release versions entering Quality Assurance and provided on-call support for scripting and system administration issues.

- Wrote CGI script (Galena) that presented critical information on availability, release, and upgrade readiness of DATAllegro software.

- Developed series of quarantined source control repositories to hold Open Source code that Microsoft desired to omit as official code base.

- Used Python 2, Linux Shell, Ant.

FULL TIME: DATALLEGRO, Aliso Viejo, CA   **August 2006 — August 2007**

Technical Support Representative / Devops

- Diagnosed, troubleshot, and resolved technical problems for internal installations and 4 customer sites, delivering effectively in timely manner.

- Utilized Salesforce record-keeping software to track customer contacts and service activity, and prepared documentation that helped streamline troubleshooting efforts.

- Produced copious documentation of processes using hyperlinked HTML, providing first-time definition of numerous previously undocumented processes.

- Wrote code that facilitated comparing n machines in database cluster for inconsistencies.

- Used Python 2, Linux Shell.

FULL TIME: UNIVERSITY OF CALIFORNIA IRVINE, Irvine, CA   **March 1993 — September 2006**

System Administrator / Devops, Network & Academic Computing Services
Worked within large division covering UNIX, Linux, Macintosh, and Windows platforms. Designed, developed, and deployed applications to automate administrative functions and facilitate smooth acquisition of system configuration data. Performed routine and advanced system administrator tasks and wrote documentation.

- Automated common processes, utilizing sh and bash scripting that streamlined system installs and upgrades across Linux (Debian, Redhat), Solaris, IRIX, Tru64, and SunOS platforms.
- Created patch application process in Python and bash that was adopted as standard tool for updating system patches.
- Wrote BSD-compatible printsystem in Python in response to early Solaris printsystem issues, easing printsystem replacement in future and providing users with greater printing reliability.
- Used Python 1, Python 2, bash, make, C, C++, m4.

EDUCATION & CREDENTIALS
- **Master of Science (MS)**, Computer Science, University of Cincinnati, Cincinnati, OH
- **Bachelor of Science (BS)**, Computer Science, University of Cincinnati, Cincinnati, OH.
  Graduated with Honors in Computer Science

PROFESSIONAL ASSOCIATION
- Founder, Orange County Python User Group, January 2010

INTERNET-BASED PORTFOLIO

- *Many* code and documentation samples available at:
  https://stromberg.dnsalias.org/~strombrg/tech-tidbits.html
- If only looking at one project, please select: https://stromberg.dnsalias.org/~strombrg/backshift/