Bert JW Regeer

▬ Skills

Languages	C++ (including C++11), C (including C11), Python (2.x and 3.x), Java
Databases	PostgreSQL, MySQL (MariaDB), and SQLite 3
Versioning	git, Mercurial, Subversion and CVS
Security	Cryptography primitives and fundamentals, including understanding and mitigating common pitfalls. Familiar building secure software, and addressing various security issues. Architecting secure network systems with defense in depth, understanding data flow, compartmentalising and building access policies.
Other	Bugtraq, JIRA, Confluence, OpenFire (Jabber), Gitlab, Gitorious, Sphinx (Documentation), LATEX, Doxygen, Klocwork, VMWare (Fusion, Workstation), VirtualBox, KVM, Jenkins, postfix, nginx, uwsgi, varnish, Pyramid
	IPv4 and IPv6 deployment and software compatibility.
OS	FreeBSD (jails), Mac OS X (10.3 - 10.9), OpenIndiana (Solaris) (zones), Linux (Ubuntu, Cent OS), Windows (Vista, 7, 8)

▬ Experience

Professional

2012–current   **Lead Software Engineer**, *Tumble Inc*, Parker, CO.
- Lead generation and preparing quotes for proposals
- Work with clients to define project scope and timeline of deliverables
- Develop custom software to meet client needs in C++ and Python
- Development of websites using Python (Pyramid Web Framework, Mako, SQLAlchemy) with PostgreSQL backend database
- Built custom websites for data collection increasing customers visibility into their users requirements and helped customer more easily collate data
- Secured customer networks/data against intrusions by architecting a distributed system with strict separation of concerns
- Server administration work, migrating from old infrastructure to new infrastructure, including custom software to help migrate customer data

2010–2014   **Sr. Software Engineer**, *Absio Corporation*, Littleton, CO.
- Developed scalable, fault tolerant, and high availability systems using C++, Python, Postgres and ZeroMQ
- Architected software for deployment in a high security environment with separation of responsibilities
- Led small team and worked with other teams to implement features and requirements
- Drafted, designed, and helped implement all cryptographic decisions for Absio Message
- Successfully deployed to production for Absio's commercial beta launch
- Worked with stakeholders to plan and develop future projects and ideas
- Built various websites using Pyramid, SQLAlchemy, and Bourbon (SASS)
- Development operations experience:
  - Managed FreeBSD (jails), OpenIndiana (zones), and Linux servers
  - Setup and managed git repository hosting using Gitlab (replaced Gitorious)
  - Setup and managed Jabber server (OpenFire) to allow for easy communication between developers
  - Setup and managed Jenkins continuous integration server, along with build slaves

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2002–2013 **System Administrator**, *osnn.net*.
- Administered hosting for a variety of online websites using Apache, PHP, and qmail on FreeBSD.
- Monitor services for attempted intrusions and outdated software, and update as required
- Migrated website from one location to another with zero downtime

Contract & Short Term

2009 **Internship/Website Developer**, *AEC Consultants*, Phoenix, AZ.
- Built and designed a new website using PHP best practices (with Zend Framework)
- Designed and built MySQL database tables to store the data required (portfolio/existing projects and new request for proposals)
- Edited copy and designed the layout of various static pages

2007 **Security Auditor**, *University of Advancing Technology*, Tempe, AZ.
- Conducted a general network security audit, and enumerated exploits on the internal student intranet websites
- Identified and documented flaws in running services on the computers on campus
- Analyzed and assessed the security of proprietary network protocols for various services

Volunteer

2011–current **Goon**, *DEF CON*, Las Vegas.
- Coordinated with other volunteers and hotel staff to outfit and run the event's contest area
- Built and maintained the Contest and Event website (http://defcne.net)

2008–2010 **Volunteer Worker**, *Blackhat*, Las Vegas.
- Coordinated with 40+ volunteers to organize and run the security conference
- Laid networking and power cables, set up classrooms
- Registered and directed attendees around the conference

Interests & Projects

funcptr Technical notebook named funcptr (short for function pointer) at `http://funcptr.net/`. Includes technical tips and tricks as well as engineering challenges and solutions to help other users solve similar computing problems.

open source Extensive work with the Pylons Python web framework team on improving Pyramid. I am currently the maintainer for pyramid_mako, and have released various pieces of code under open source licenses. Additional open source personal projects with on-going code commits available on Github/bertjwregeer.

near space Worked with a team of other students at the University of Advancing Technology to design, and build a near space balloon capsule, to take pictures, atmospheric measurements, and send location data using APRS over HAM radio. The team had two successful launches, named CONNERY-1 and CONNERY-2, resulting in amazing pictures from the flights.

Education

2006–2009 **Software Engineering**, *University of Advancing Technology*, Tempe, AZ.
Bachelor of Science: Software Engineering
Major: Computer Programming