JAMES T SNELL

PROFESSIONAL ENGINEER

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OBJECTIVE

I love to develop excellent and meaningful devices, products and services. I seek to face interesting unknowns together, with clever & motivated people.

PERSONALITY

- Self-starter, adaptive and driven
- Comfortable architecting and leading development.
- Very willing to follow excellent leaders
- Life-long exposure entrepreneurial mentality

BUZZWORD BINGO

Java, Objective-C, C/C++, PHP, Python, Swift3, Javascript, jQuery, Ajax, HTML, CSS, BASH, Geoserver, MySQL, Postgres/PostGIS, Virtualization, svn, git, gitlab, devops, continuous integration, Apache2, nginx, CAD (Fusion 360), VHDL, FPGAs, PCB layout, Agile method, DRY principle

RECENT EXPERIENCE

LIDAR SERVICES INTERNATIONAL (LSI) & GASRECON (GRI)

SEPTEMBER 2011 TO PRESENT, FULL-TIME

2017	- Created automated back-end-fault reporting to Slack - Built client-side cross-platform updater & monitor app - Continued software dev ownership for LSI & GRI - Prototyped precision-logging for next-gen aerial photos - Detailed reporting of IP potentially tax-break worthy - Provided in-field support for aerial data collection
2016	- Built auto data-pipeline, reduced staff overhead costs - Scaled-up use of in-house ESX, Retired EC2 systems - Ported all IP from Trac/SVN to Gitlab/git - Modernized automated build system for LSI - Devised auto unit test exec and report bundling for LSI - Prioritized R&D, informed by providing end-user support - Supported aerial and ground LSI/GRI data collection
2015	- Coordinated GRI's rapid prototyping, continued from 2014 - Owned cloud roll-out to EC2. Handled all 20 Linux servers - Nights, weekends, dev (Java) to handle evolving GRI needs - Flew/supported 5 weeks of LSI data collection in Costa Rica - Became sole on-staff developer for both LSI and GRI - Co-integrated higher-accuracy GPS for GRI field systems
2014	- HW & SW co-integration of new LiDAR scanner for LSI - Co-integrated new COTS DSLR cameras for LSI aerial ops - Commenced rapid prototyping of new GRI sensor platform - Organized all DevOps for LSI/GRI Software Team, 3 devs - Owned R&D feedback loop with GRI field ops - Continued occasional LSI field operations support
2013	- GRI (pipe mapping and CH_4 leak detection) first established - Major GRI systems architectural & road-mapping input - Flew field support for nearly all LSI projects
2012	- Joined LSI SW team (2 people). Began Java development - Most dev efforts focused upon Matrix; for aerial surveying - Continued extensive LSI field operations role
2011	- Joined LSI in system's support role (hardware focused) - Installed, flew, repaired manned aerial surveying systems

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APP STORE

https://dawning.ca/apps

I've recently released a few glorified *hello-world* apps to Apple's App Store. I've especially enjoyed watchOS and macOS dev.

PERSONAL LAB

I maintain a home environment of Linux and BSD servers. I prototype with them and frequently roll-out my findings beyond my lab. I'm a major lover & very seasoned user of all-things Unix.

3D PRINTERS

https://dawning.ca/df

https://dawning.ca/cc155

I was an early adopter of 3D printers. I've built two, one a heavily altered kit, the other from scratch. My printers have various excellent customizations.

MRI/CT 3D MODELLING

https://dawning.ca/skulls

I've processed & printed complex models derived from actual raw MRI data of my nephew's skull. I recently gained access to the Smithsonian's CT scan database for future such projects.

MORE

https://jamessnell.com

http://linkedin.com/in/jamestsnell

https://github.com/docdawning

https://dawning.ca/hackaday

COLUMBIA COLLEGE CALGARY
APRIL 2009 TO PRESENT, CONTRACTED-BASIS

I've been involved with Columbia since around 1998. My first job was servicing hardware and providing help desk support. In 2009, I founded their Security Services training eLearning platform using Moodle with AWS-hosted LAMP services. Paypal-driven self-enrolled students have attended our online programs in Security Services ever since.

With Columbia's ESX infrastructure, I coordinate all Linux-based services ever since I first established them. This includes an in-house AD-integrated Moodle deployment (separate to the above mentioned) with over 2000 active student & staff accounts.

I have created and deployed various generations of Columbia's public website (upon Wordpress, on self-hosted Linux servers). This includes establishment and coaching of SEO and Social Media advertising campaigns. We recently have outsourced this to an external firm, though I continue to coach the internal and external team members.

FORMAL EDUCATION & CREDENTIALS

PROFESSIONAL ENGINEER DESIGNATION (P.ENG), LICENSED BY ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF ALBERTA (APEGA), 2015

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING, UNIVERSITY OF CALGARY, 2010

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, EMBEDDED SYSTEMS CONCENTRATION, UNIVERSITY OF CALGARY, 2010

INTERESTS

I'm perpetually working on personal projects aimed to help me gain new skills. Some of the methods I explore in my home lab end up inspiring systems I deploy professionally. I've listed my most recent projects to the left.