



**JAMES T SNELL**  
PROFESSIONAL ENGINEER

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**PERSONALITY**

- Self-starter, adaptive and driven
- Comfortable architecting and leading development.
- Very willing to follow excellent leaders
- Entrepreneurial mentality
- Inquisitive & life-long learner

**TOP COMPETENCIES**

Java, JavaScript, jQuery, HTML/CSS, BASH, Virtualization (AWS/VMware), svn, git, gitlab, DevOps, Apache2, nginx, Linux, Agile method, DRY principle

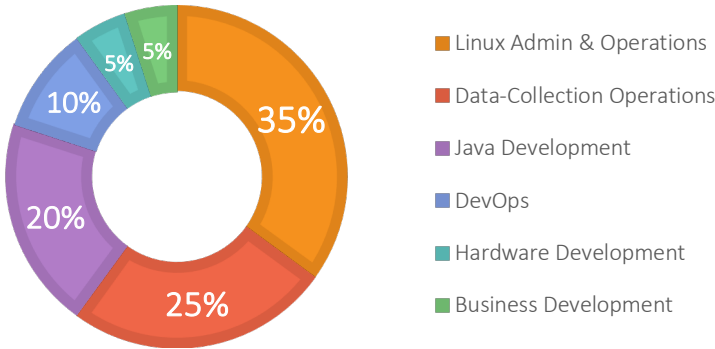
**GROWING COMPETENCIES**

Ansible, Python, C/C++, Swift, Objective-C, PHP, MySQL, Postgres/PostGIS, Geoserver, maven, ant, gradle, continuous integration, CAD (Fusion 360), VHDL, FPGAs, PCB

**OBJECTIVE & OVERVIEW**

I thrive at designing, building and supporting systems upon Unix type platforms. My past projects have tended towards medium-scale web applications and data-collection hardware. I seek to collaboratively create high-impact systems with clever people.

The current time-distribution of my multiple roles is illustrated below.



**RECENT EXPERIENCE**

**LIDAR SERVICES INTERNATIONAL (LSI) & GASRECON (GRI)**  
SEPTEMBER 2011 TO PRESENT, 32HRS/WK

I juggle many roles with LSI/GRI. Below gives a timeline, illustrating the evolution of my involvement with both companies.

2018	- Expanded role to include ~5% business development focus
2017	- Rolled-out Ansible, retired custom BASH orchestration - Next-gen aerial photography precision-logging prototyping - Created automated back-end-fault reporting to Slack
2016	- Developed data pipe automation, reduced overhead 60% - Devised auto unit test exec and report bundling for LSI - 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 - Java montages (nights/weekends) to bootstrap GRI Cloud
2014	- HW & SW co-integration of new LSI LiDAR scanner - Commenced rapid prototyping of new GRI sensor platform - Organized all DevOps for LSI/GRI Software Team, 3 devs - Owned feedback-loop with GRI field ops, steered R&D
2013	- LSI spawned GRI (pipe mapping and CH <sub>4</sub> leak detection) - Major GRI systems architectural & road-mapping input - Flew field operations support for nearly all LSI projects
2012	- Joined LSI SW team (2 people). Began Java development - Dev efforts focused at enhancing aerial surveying system - 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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## RECENT PROJECTS

### APP STORE

<https://dawning.ca/apps>

I've released a few glorified *hello-world* apps to the App Store. I've especially enjoyed watchOS and macOS dev. I'm planning a medical assistive app next.

### 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://jamesnell.com>

<http://linkedin.com/in/jamestsnell>

<https://github.com/docdawning>

<https://dawning.ca/hackaday>

## COLUMBIA COLLEGE

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 on-prem 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.

Most recently, I've provided key input and steering towards a major re-org of Columbia's internal IT operations.

## 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

INTERNSHIP PROGRAM,  
UNIVERSITY OF CALGARY, 2010

### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

EMBEDDED SYSTEMS CONCENTRATION,  
UNIVERSITY OF CALGARY, 2010

## INTERESTS

I often pursue personal projects aimed to help me gain new skills & exercise my creativity. My projects typically focus upon software, Electrical or Mechanical Engineering. Many projects positively boost my professional work. I've listed some key projects to the left.

I love dogs, cats, espresso and guitars.