I thrive at designing, building and supporting fantastic systems, especially upon Unix type platforms. My R&D experience is focused around web applications and data-collection systems. I seek to build high-impact systems and evolve my skills with clever people.

Below illustrates typical multi-role functions I've handled during the bulk of my professional experience, with LiDAR Services / Gas Recon.

- Linux Admin & Operations (SRE)
- Software Development (Java)
- DevOps (gitlab)
- Data-Collection Operations
- Business Development
- Hardware Development

JAMES T SNELL
PROFESSIONAL ENGINEER

Calgary Alberta, T2E0M9, Canada
1-403-616-7685
james@dawning.ca

PERSONALITY

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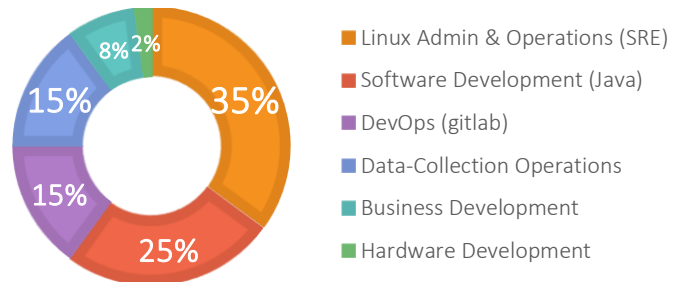- Inquisitive & life-long learner

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

OTHER TECH COMPETENCIES
Ansible, Python, C/C++, Swift, Objective-C, PHP, jQuery, MySQL, Postgres, Geoserver, maven, ant, continuous integration, CAD (Fusion 360), VHDL, FPGAs, PCB layout

NOVATEL INC (HEXAGON POSITIONING INTELLIGENCE)
APPLICATIONS ENGINEER   JUNE 2018 TO PRESENT

Applications Engineering at NovAtel entails advanced GNSS problem solving & troubleshooting to support high-profile customers.

- Integration customer support of extreme-precision positioning systems
- Support focus on Linux users & OEM7 API (Lua) adopters
- Inter-team facilitator with desktop software team

LIDAR SERVICES INTERNATIONAL (LSI) & GASRECON (GRI)
INTEGRATION ENGINEER   SEPT 2011 TO JUNE 2018

The below timeline illustrates my evolution in my time at LSI/GRI.

2018	- Expanded role to include some business development activities
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_4 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

JAMES T SNELL
PROFESSIONAL ENGINEER

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 have a small product roadmap that I'll implement when my schedule permits.

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 PRINTING
https://dawning.ca/df

https://dawning.ca/cc155

I was an early adopter of 3D printers. I've built two custom machines that suit my needs.

3D CAD MODELING
https://dawning.ca/skulls

I've processed & printed complex models derived from actual raw MRI data. I often print 3D models I design via Fusion360 to help me better organize my home lab.

MORE
https://jamessnell.com

http://linkedin.com/in/jamestsnell

https://github.com/docdawning

https://dawning.ca/hackaday

COLUMBIA COLLEGE
SRE CONTRACTOR   APRIL 2009 TO PRESENT

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, implemented upon AWS-hosted LAMP services. PayPal-driven self-enrolled students have attended our online programs in Security Services, with 26,000 accounts as of May 2019.

With Columbia's on-prem ESX infrastructure, I coordinate all Linux-based services, dating back to when I first established them. This includes an in-house AD-integrated Moodle deployment (separate to the above mentioned) with over 2,000 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. These broaden my skills & exercise my creativity. My projects typically focus upon Software, Electrical or Mechanical Engineering disciplines. Many projects positively boost my professional work. I've listed some key projects to the left.

I love dogs, cats, espresso and guitars.