



## JAMES T SNELL

PROFESSIONAL ENGINEER (P.ENG)

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### PERSONALITY

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

### TOP TECH COMPETENCIES

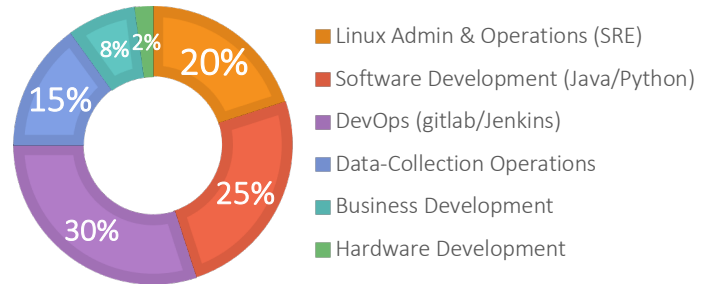
Python, Java, BASH, Linux, Ansible, Ansible Tower, Docker, AWS, VMware vCenter/vSphere, SVN, perforce helix, git, GitLab CI/CD, DevOps, Jenkins, Apache2, nginx, JavaScript, HTML/CSS

### TECH FAMILIARITIES

C/C++, Swift, Objective-C, PHP, jQuery, MySQL, Postgres, Geoserver, maven, ant, CAD (Fusion 360), VHDL, FPGAs, PCB layout

I thrive at designing, implementing and operating reliable, maintainable and scalable systems. My R&D experience is largely focused in Software Development, DevOps, and data-collection systems.

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



### NOVATEL INC (HEXAGON AUTONOMY & POSITIONING)

DEVOPS SOFTWARE ENGINEER

NOV 2020 TO PRESENT

- Behind-scenes leadership to found and scale the new 9 member DevOps team
- Founded and led company-wide pivot from Perforce Helix to Git (GitLab)
- Software development in support of ASPICE adoption and DevOps Metrics
- Continual velocity improvements through build pipeline innovations
- Led the Open Source group driving public code offered via GitHub

### NOVATEL INC (HEXAGON AUTONOMY & POSITIONING)

APPLICATIONS ENGINEER

JUNE 2018 TO NOV 2020

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
- Founded and steered NovAtel's public GitHub presence

### LIDAR SERVICES INTERNATIONAL (LSI) & GASRECON (GRI)

INTEGRATION ENGINEER

SEPT 2011 TO JUNE 2018

(CONTRACT WORK UNTIL 2021)

I've worked through all aspects of LSI/GRI's R&D and Operations groups. These are aerial and ground-based surveying companies. My responsibilities have included:

- Electrical/Hardware design and implementation of surveying systems
- Extensive software development (Java-based) on remote sensing platforms
- Design/Implementation/Support of customer-facing Cloud services
- Founded and maintained all DevOps practices and systems
- Owned all things DevOps through three generations of DevOps systems
- Owned Operations of virtualization infrastructure (internal + external facing)
- Software Development coordination of software team (size varied from 1 to 4)
- Aerial operations (installation, in-air ops and ground-support)
- Data processing support for ground-based methane/pipe-locate mapping
- SRED reporting support

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## RECENT PROJECTS

### APP STORE

<https://dawning.ca/apps>

[Windows Store](#)

I've released a few glorified *hello-world* apps to Apple's App Store and the Windows Store. This has been to learn the ropes of these ecosystems. I'll continue implementing my small product roadmap, schedule permitting.

### 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 the Unix way of life.

### 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://jamesnell.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.