

Gavin Heverly-Coulson, PhD

Big Data Developer

New Westminster, British Columbia, Canada

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Work Experience

AbCellera Biologics

Senior Software Developer

Vancouver, British Columbia

Dec. 2020 - Present

- Build custom Django/Vue application to track complex scientific workflows
- Translate scientific concepts into data models and intuitive user interfaces
- Lead a team of developers to carry new features from design to implementation
- *Technologies:* Python, Typescript, Django, Vue, gRPC, Docker, PostgreSQL, AWS

HERE Technologies

Lead Research Engineer

Senior Research Engineer

Berkeley, California

Mar. 2019 - Nov. 2020

Jun. 2016 - Mar. 2019

- Worked across research and production software development
- Architected and built data pipelines and webapps running on AWS cloud and Kubernetes
- Developed scalable geospatial and computer vision algorithms
- Led creation of CI/CD processes for various projects
- *Techologies:* Python, C++, Scala, Docker, MapReduce, AWS, Flink, Kubernetes, Gitlab

Civil Maps

Systems Engineer

Albany, California

Jan. 2016 - Apr. 2016

- Developed LiDAR sensor data processing code
- Built custom MapReduce framework leveraging Docker and Redis
- Re-implemented algorithms with MapReduce, increasing throughput an order of magnitude
- Collaborated with tech team to introduce a continuous deployment workflow
- *Techologies:* Python, NumPy, Docker, MapReduce, Redis

Education

The Data Incubator

Data Science Fellow

Online

2015

- Data science bootcamp to assist STEM PhDs transition to industry positions
- *Techologies:* Python, NumPy, Data Science

Queen's University

Postdoctoral Fellow

Kingston, Ontario

2012 - 2014

- Project: Development and testing of a predictive model for static friction coefficients
- *Techologies:* Fortran, Python, High Performance Computing

Dalhousie University

Ph.D. Computational Chemistry

Halifax, Nova Scotia

2008 - 2012

- Thesis: Computational Model of the Catalytic Cycle of Organoselenium Antioxidants
- *Techologies*: Python, High Performance Computing

Bishop's University

B.Sc. Honours Chemistry

Lennoxville, Quebec

2004 - 2008