# Russell Prentice – GIS Application Developer Geospatial Consulting Co.



### Education

B.Sc. Geographical Biogeosciences, University of British Columbia, Vancouver, BC, 2016

Advanced Diploma Geographic Information Systems GIS, British Columbia Institute of Technology, Burnaby, BC, 2018

### **Employment History**

LICKER GEOSPATIAL CONSULTING CO. Vancouver, BC – GIS Geospatial Modeler (Jan. 2018 to Present)

#### **ELECTIONS BC**

Victoria, BC – Information Data Processor (Jan. to Sept. 2017)

MUSOUEAM INDIAN BAND

Vancouver, BC - GIS Technician

(May to Sept. 2015 and 2016)

BC MINISTRY OF ENVRIONMENT

Surrey and Victoria, BC – Groundwater mapping assistant

(Sept. 2014 to May 2015)

COMOX VALLEY PROJECT WATERSHED SOCIETY

Courtenay, BC – GIS Technician (May. to Sept. 2013)

### Expertise

- -ArcGIS
- -ArcGIS Enterprise
- -Portal for ArcGIS
- -QGIS
- -Python
- -JavaScript, HTML, CSS
- -Mapbox
- -Database Management

# **Biography**

Russell Prentice is a graduate of the BCIT Advanced Diploma in GIS Program, and holds a BSc in Geographical Biogeosciences from UBC. He is proficient with ESRI products, including ArcMap 10.7, ArcGIS Pro 3.0+ and ArcSDE. Throughout his career, Russell has undertaken GIS projects in various fields and disciplines, collaborating with local, provincial, and regional governments, non-profit organizations, and First Nations. He possesses excellent technical expertise in data synthesis, workflow automation, inventory development, documentation, and quality control.

Moreover, Russell has a strong working knowledge of Python, enabling him to automate workflows and conduct complex geospatial analyses. He has effectively utilized these skills to implement solutions using both open-source libraries and Arcpy. His accomplishments include the development of numerous build-out models for estimating housing capacity and carbon emission reductions, as well as writing a script to organize millions of unstructured GPS data points into accurate routes.

In addition to being a highly technical resource, Russell maintains an exceptional design ethic. His keen eye for design, combined with his programming knowledge, allows him to skillfully transform raw data into visually appealing and functional GIS web applications tailored to his clients' needs. Russell is passionate about geospatial analysis in all its forms and is always eager to tackle new challenges.

# Select Project Experience

#### **Urban Simulation**

- Residential capacity modeling and tool creation City of Victoria Geospatial Modeler
- Residential capacity modeling for equivalent dwelling unit projections – City of Langley – Geospatial Modeler
- Official community plan support District of North Saanich Geospatial Modeler
- Official community plan support Cowichan Valley Regional District – Geospatial Modeler
- Official community plan support City of Nanaimo Geospatial Modeler
- Vancouver plan GIS support City of Vancouver GIS Analyst
- Industrial lands intensification initiative City of Richmond GIS Analyst
- Industrial lands analyses City of Cranbrook GIS Analyst
- Residential capacity modeling for parks plan update— City of Langford — Geospatial Modeler
- Demographic forecasting for EMME Transportation model City of Vancouver – Geospatial Modeler
- Demographic forecasting for trail network strategy City of Port Moody – Geospatial Modeler
- Infill capacity analysis Town of Okotoks GIS Analyst
- Parks happiness assessment Mexico City GIS Analyst
- Food flow mapping Metro Vancouver Regional District GIS Analyst
- Food and agriculture strategy City of Yellowknife GIS Analyst
- Golden horseshoe land use classification Translink GIS Analyst

# **Carbon and Energy Modelling**

- Carbon neutral strategy scenario modeling Metro Vancouver Regional District – Geospatial Modeler
- Greenhouse gas modeling City of Surrey Geospatial Modeler
- Community energy and emissions plan modeling – City of Richmond – Geospatial Modeler
- Transportation greenhouse gas estimates Province of British Columbia – GIS Analyst
- Surrey buildings greenhouse gas tool creation
  City of Surrey Geospatial Modeler
- Energy modeling and forecasting City of Abbotsford – Geospatial Modeler
- Development of an offroad inventory Province of British Columbia – GIS Analyst
- Energy and emissions modeling City of Vancouver – Geospatial Modeler
- Greenhouse gas costing analysis City of Surrey – GIS Analyst
- Climate action secretariat buildings inventory Province of British Columbia – GIS Analyst
- Electric vehicle prioritization Metro Vancouver Regional District – Geospatial Modeler
- Community climate action plan City of Kamloops – GIS Analyst

# **Site Selection, Logistics & Routing**

- Creation of a custom wayfinding application University of British Columbia – GIS Developer
- Bike network usage analysis City of Toronto
   Geospatial Modeler
- Snowplow route optimization City of Abbotsford – Geospatial Modeler
- Non-market housing site selection tool City of Calgary – Geospatial Modeler
- Cycling infrastructure assessment City of Vancouver – Geospatial Modeler
- Cycling infrastructure assessment Regional District of York – Geospatial Modeler
- Housing site evaluation City of Cranbrook GIS Analyst
- Electric vehicle infrastructure analyses City of Surrey – GIS Analyst
- Electric vehicle infrastructure analyses City of Kamloops – GIS Analyst

# Webmaps, Catography & Visual Storytelling

- BC mine tailings webmap Smarter Shift GIS Developer
- Alberta housing webmap ASCHA GIS Developer

- Victoria housing webmap Aryze GIS Developer
- Webmap of client directory Futurpreneur GIS Developer
- Housing Needs Assessment Dashboard University of British Columbia – GIS Developer
- Land Awards Wall Map Art REFBC GIS Technician
- GIS Mapping support Arrowstone Archaeological – GIS Technician
- Artist survey and mapping support –
  Vancouver Culture Crawl GIS Technician

# **Additional GIS Support Services**

- Seismic risk assessment and mapping City of Surrey – GIS Analyst
- Data Analytics to support developments and housing research – Aryze – GIS Analyst
- GIS Support Krech Ojard Consultants GIS Analyst

# **Remote Sensing**

- Irrigable areas analysis District Municipality of Whistler – GIS Analyst
- Creation of a 3D buildings model Metro
  Vancouver Regional District GIS technician