

Nikola Tutić

Portfolio at tutic.ca Code at github.com/ntutic +1 819 349-3340 • nikola@tutic.ca

Profile

Biologist turned developer, I got into programming to solve my needs for automation and data processing before getting hooked on it, striving to deepen my mastery over the long term. The variety of commissioned projects I've completed with freelancing has let me prove my versatility and resourcefulness as I now seek to progress within a team.

Stack

Lang: Python, JS, Java, C, Exel, VBA, R Data: SQL, PostgreSQL, MongoDB, PyModbus, pyserial, Spark, Hadoop Scraping: Scrapy, Selenium, HTTP **GUI:** Qt, PySide6, MS Access, pystray Web: APIs, HTTP, Chrome Manifest, MVC, SPA, Django, Spring, templates Cloud: AWS EC2, RDS & Lambda and more...

Portfolio Preview

- ◆ Desktop interfaces controlling machines in the dairy industry
- Chrome extensions augmenting or overhauling dynamic sites' functionality
- Integrated solutions for scraping and processing of unstructured web data
- Workflow automation of repetitive desktop or web tasks

Work Experience

Freelance Software Developer

UpWork (profile and reviews at tutic.ca/upwork)

2022 - Current

Remote

- Design and development of software solutions meeting client mandates
- Integration of tools and concepts specific to various fields of expertise
- Extensive communications for client relations and outreach

Contractual Technician & Software Developer

2021 - Current

Oneka Technologies

Sherbrooke, Canada

- ◆ Chrome extension for timesheet management used by >60 employees
- Scripting for oceanographic geospatial data processing
- Monitoring of test bench and of remote buoys

Project Manager (as Biologist)

2018 - 2020

Organisme des bassins versants Vaudreuil-Soulanges Conseil de l'eau Gaspésie Sud

Saint-Polycarpe, Canada Bonaventure, Canada

- Conception and execution of riparian strip conservation projects
- Outreach and collaboration with municipality officials and land owners
- Use of GIS and computer tools to facilitate work on these ongoing projects

Technical Support

Sykes Enterprises

2017 - 2018 Sherbrooke, Canada

◆ Replacement floor supervisor and instructor

◆ Second level customer support for a mobile phone provider (FR & EN)

Agro-Entrepreneur

2016 - 2017

Écollab (now Agropol)

Sherbrooke, Canada

• Production of microgreens and honey for restaurants and farmers markets

• Construction of farming installations and maintenance of large gardens

Analyst (4 month internship)

2016

Québec's environment ministry (MELCC)

Rimouski, Canada

Processing of authorization certificate requests related to water bodies

Writing reports and communications on behalf of the ministry

Research Assistant (4 month internships)

2014 - 2016

Lab d'écologie végétale (Université de Sherbrooke) Lab d'écologie d'arthropodes tropicaux (ECOFOG) Tree Snail Conservation Lab (Univeristy of Honolulu) Sherbrooke, Canada Kourou, French Guiana Honolulu, United States

Development and execution of rigorous field and laboratory protocols

Reviewing scientific literature for analysis and writing

Education

Big Data Development

2022 - Current

Collegial attestation(AEC) - (part-time, evenings)

Collège Bois-de-Boulogne

Notions on data management, processing and security

• Exploration of big data tools likes Spark, Hadoop, Kafka, Flink and more

Geomatics 2020 – 2021

Graduate studies (DESS)

Université de Sherbrooke

Fundamentals of cartography, geospatial data and remote sensing

Application of GIS tools for data analysis, chain processing and mapping

Ecology 2013 – 2016

Undergraduate degree (bachelor's)

Université de Sherbrooke

- Study of relationships between living organisms and their environments
- Analysis of messy ecological data from field or lab protocols

Languages

Pesonal Interests

- French (native)
- Serbo-croatian (native)
- English (equivalent to native)
- Spanish (intermediary)

- Travelling and nature
- Running and cyclism
- Culinary exploration
- Finance and stock markets