

Robert Beaudenon

www.github.com/robertbeaudenonrobertbeaudenon.com

Education

Concordia University	Montreal, QC	Sep 2018 - Jun 2021
<ul style="list-style-type: none"> Major: Software Engineering, B.S.E (GPA: 3.74) Programming Coursework: Algorithm & Data Structures, OS, Artificial Intelligence, Data Systems, Data Analytics, Machine Learning. 		

Experience

Software Developer	Voyant	Apr 2020 - Today
<i>Computer Vision</i>		
<ul style="list-style-type: none"> Integrated object detection in videos using Google vision API, Detectron2 and supervising a team of 8 to build the website. Built large custom datasets, preprocessed the data and trained models to increase the recognition accuracy. Leveraged knowledge in Git, GCP (Google Cloud Platform), CVAT, Computer Vision, Python, Bash. 		
Software Developer Intern	National Bank of Canada	May - Sep 2019
<i>Bank IT Security - Team IAM (www.nbc.ca)</i>		
<ul style="list-style-type: none"> Implemented scripts to automate the deployment of a vault solution that manages the access of high privileged users to servers. Automated the deployment of an Agent to monitor the vault solution. Integrated the users and the servers of the bank with the vault solution. Leveraged knowledge in Git, Linux (CentOS, RHEL), Windows (2012R2, 2016), Ansible, Terraform, Jinja2, Docker, Jenkins, PowerShell, AWS, VMware, ELK (Elasticsearch, Logstash, Kibana), Jira, Agile. 		
Software Developer Intern	Dataflow	Jun - Aug 2018
<i>Solutions for the Banking and Finance industry (www.dataflow.com.lb)</i>		
<ul style="list-style-type: none"> Developed an Android application to store and manipulate records. Created a Responsive Design adapting to various screen sizes to provide a good user experience to customers. Leveraged knowledge in Git, SQLite and programmed in Java using Android Studio IDE. 		

Engineering Projects

Personal Website: www.robertbeaudenon.com (for projects and additional information)

Real Time Inventory Auditing System	Fall 2020 - Win 2021
<ul style="list-style-type: none"> Developed a platform that allow real time auditing of warehouses to increase inventory accuracy and reduce unnecessary expenditures. Led multiple tutorials to explain Django and Angular to our team of 10 (Available on my website). <u>Utilized:</u> Git, GitHub Actions, Django, Angular, MongoDB, AWS, Agile. 	
Face Recognition in Zoom Videos	Fall 2020
<ul style="list-style-type: none"> Built a Custom dataset on specific people I want to recognize, preprocessed it, applied data augmentation and labeled it. Trained Detectron2 and analyzed the effects of different environments to understand how well the model can generalize. <u>Utilized:</u> Python, Google Colab, CVAT, Detectron2, Docker. 	
Artificial Intelligence Optimal Path Finding Algorithm	Sum 2020
<ul style="list-style-type: none"> Generated a customizable crime risk map based on predefined crime rates data at specific coordinates. Implemented an A* heuristic search algorithm to find an optimal path between two coordinates on the map under 10 seconds. <u>Utilized:</u> Python, PyCharm IDE. 	
Machine Learning & Natural Language Processing: Naïve Bayes Classifier	Sum 2020
<ul style="list-style-type: none"> Generated a probabilistic model from the Hacker News dataset fetched from Kaggle. Predicted the class type of each title using a Naïve Bayes Classifier. Conducted multiple experiments to study the improvement in performance of the model and used graphs to visualize the results. <u>Utilized:</u> Python, PyCharm IDE. 	
Campus Navigation Map	Win 2020
<ul style="list-style-type: none"> Developed an Android application for university students that allow users to navigate on the Concordia campus using Google Maps API. Implemented outdoor and indoor navigation between classes and displayed outdoor points of interest to facilitate the life of students. <u>Utilized:</u> Git, Kotlin, SQLite, Android Studio IDE, Jenkins, AWS (EC2), GCP, Zenhub. 	
Market Place Website (Personal Project)	Win 2020
<ul style="list-style-type: none"> Developed a platform for university students that allow users to request services or make money by applying for services. Designed a RESTful backend server to allow real time messaging, geolocation, rating and image upload between the users. <u>Utilized:</u> Git, Angular, NodeJS, MongoDB, Heroku, AWS (S3 Bucket), Socket.io, JWT and debugged using Chrome Developer Tools. 	
Twitter Website Replica	Win 2019
<ul style="list-style-type: none"> Implemented a friendly interface of Twitter. Worked mostly on the back-end using NodeJS creating features such as Follow/Unfollow a user, Registration and Like/Delete a tweet. <u>Utilized:</u> Git, Angular, NodeJS, MySQL, Visual Code IDE. 	
Restaurant Application	Win 2018
<ul style="list-style-type: none"> Designed the architecture using various diagrams to generate the model and get an overview of the system. Implemented the application that assisted waiters for reservations, ordering, and billing and owners for creating menus. <u>Utilized:</u> Git, Java, Windows builder plugin, Umple (to generate the model), Class Diagram, Sequence Diagram, State machine. 	

Skills

Technical tools: Java, Python, C, JavaScript, PHP, Angular, NodeJS, Django, Html/CSS, Ruby, Ansible, Terraform, MySQL, MongoDB, Neo4J, AWS, GCP, Jenkins, Docker, Linux/Unix, Git, Agile.

Currently fulfilling a master course in Big Data Analytics at Concordia (SOEN 471):

- It presents the principles of the Hadoop ecosystem, Apache Spark, and it details the main algorithms for the analysis of large datasets, related to similarity search, mining of frequent itemsets, graph analysis, clustering, stream mining, recommender systems and advertising.
- By the end of this course, students will be able to write and deploy efficient parallel algorithms to analyze Big Data sources for various applications.

Languages: Fluent in English, French and Arabic.

Awards and Acknowledgement

- 2nd place in the Middle East Wakeboarding championship 2014.
- Strong interest in Surfing, Skating, Hiking, Travelling, Photography and Music.
- Helped to deliver and organize food boxes to support victims of the Beirut port explosion with World Central Kitchen.
- Participated in a Capture the Flag (CTF) event organized by CSE Canada and attended the VARONIS webinar on Anatomy of an attack.
- Participated in two AWS Gameday Hackathon (Machine Learning & Cloud) and attended the AWS re-invent conference.