Julian Mentasti Meza

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Skills

Programming Languages: Java, JavaScript, Golang, Python, C++ and Racket
Markup Languages: XML, HTML 5 and CSS
Database Management Systems: MySQL, PostrgreSQL and SQLite
Operating Systems: Linux/Unix systems (ArchLinux, Ubuntu, EdgeOS, CentOS) and Windows
Frameworks, Libraries and tools: Django, Jupyter, Pandas, Git, OpenCV3, gRPC, XML-RPC and LaTeX
Languages: Full fluency in English and Spanish
github: https://github.com/Julian-Mentasti

Experience

UBC Orbit - Satellite Design Team— Vancouver, CA
- *Payload Developer and Co-Captain* January 2018 – Present
Worked to deploy a remote sensing satellite capable of identifying wildfires and forest loss by using machine learning models for the Canadian Satellite Design Challenge.

- Deployed a linear deblurring algorithm using the Lucy-Richardson algorithm.
- Created a Forrest fire identifier by inverting spectral bands and using haar cascades.
- Created a system status service to monitor Payload's computing system.

Currently, designing a new CubeSat that is is capable of taking a picture of earth and sending it back to any ham radio operator, as well as collaborating with teams from Simon Frasier University and University of Victoria to build OCRAASAT, a satellite capable of calibrating ground observatories such as CHIME. (https://www.ubcorbit.com)

University of British Columbia - Computer Science Department— Vancouver, CA
- *Undergraduate Teaching Assistant* September 2018 – Present
Teaching Assistant for CPSC 110 - Computation, Programs and Programming. A first-year introductory programming course designed by Gregor Kiczales using Racket.

CloudPBX inc— Vancouver, CA
- *Software Developer intern* June 2018 – September 2018
Worked to enable their network research team by building tools that would improve and increase their data collection methods.

- Deployed a VPN tunnel that can connect various router models, network structures and bridge the flow of large amounts of data.
- Designed a web UI that allowed stakeholders to monitor, test and view the data from their routers.
- Implemented an auto installer script that setups the company's software on routers across different architectures and connects each device to the UI and the VPN network.
- Built a remote procedure call service monitor that runs on a router, acting as a watchdog for the firm's custom software and can orchestrate each piece of software accordingly.

Coursework *(* will be completed by May 2018)*

*CPSC 425 - Computer Vision	CPSC 221 - Algorithms and Data Structures
*CPSC 320 - Intermediate Algorithm Design and Analysis	CPSC 210 - Software Construction
*CPSC 314 - Computer Graphics	CPSC 121 - Models of Computation
*CPSC 313 - Computer Hardware and Operating Systems	CPSC 110 - Computation, Programs and Programming
*STAT 302 - Probability	*CPSC 213 - Introduction to Computer Systems
Math 221 - Matrix Algebra	*Math 342 - Algebra and Coding Theory

Education

Bachelors of Science - Combined Major in Computer Science and Statistics — Expected: May 2021
University of British Columbia, Vancouver, CA — (GPA: 81/100)
International Baccalaureate Bilingual Diploma — August 2015 – June 2017
Greengates School, Mexico City, MX

Projects

PIMS BC Data Science Workshop
- *Individual*
I took part in a one week project, where as part of a team we would attempt to solve a problem for a firm using data science. I was part of the CloudPBX team, where we ended up cleaning, analyzing and displaying large sets of data. Our focus was centered around VOIP: how it worked and how we could better contextualize our data to suit the firms needs.

- Created a new metric that was more sensitive to disturbances in a phone call.
- Discovered best and worst performing ISPs
- Grouped calls to find the highest caller density

http://workshop.bcdata.ca/2018/post/5-cloudpbx-project/

Activities

UBC Quiz bowl — VP of Content (Present)
UBC Scientific Software Seminar — Attendee (Present)

Awards

Awarded Dean's Honour List - 2018 UBC
Creativity, Activity Service Award - 2017 Greengates
IB Computer Science excellence Award - 2017 Greengates
IB Business and Management excellence Award - 2017 Greengates