

Bety E. Rodriguez-Milla

Software Engineer - Data Scientist - Computational Physicist

Software Engineer with a Ph.D. in computational physics with academic and research experience, and understanding of analytical and statistical models, data science, and analytics.

Experience

- 2019-06 - present** **Software Engineer**
Zeitspace Inc.
Part of the team of product designers, software engineers, and product managers that designs and builds software products for our clients to solve complex problems.
- Front and backend developer.
 - Data engineer: Building a data pipeline for a project that involved cleaning, parsing, and extracting useful information from excel files with multiple formats.
- 2018-11 - 2019-06** **Data Scientist**
SharpestMinds
Data preprocessing, model building and evaluation, for Natural Language Processing (NLP)-focused projects. Working under the supervision of Arman Didandeh, Manager at Deloitte Canada.
- Project 1: Web Scraping with BeautifulSoup. Used Python and libraries such as Requests to get data from a webpage and BeautifulSoup to parse it.
 - Project 2: Extracting Valuable Data Insights. Used descriptive statistics, exploratory data analysis, and a variety of NLP techniques.
- 2016 - 2018** **Data Engineer**
Perimeter Institute for Theoretical Physics, Waterloo, ON
Project: Streamlining scientific and government reporting.
- Contributed to the new database reporting schema.
 - Designed data processing pipelines involving public and in-house databases.
 - Processed, cleaned, organized, parsed, and prepared those unformatted datasets, such as publications, using Python.
- 2016 - 2016** **Sessional Instructor**
University of Waterloo, Mathematics Department
Taught the course "Introductory Algebra for Arts and Social Science."
- 2008 - 2015** **Scientific Manager**
Louisiana State University and Louisiana Tech University, USA
- Managed \$34M worth of multi-university and interdisciplinary grants.
 - Developed, supported, and facilitated successful grant proposals.
 - Developed and implemented application and recruitment processes.
 - Collected information and cowrote and edited grant reports.
- 2003 - 2008** **Researcher**
Syracuse University, NY, USA
- Carried out research project of an anisotropic coarse-grained model of an over-damped extended system driven through quenched disorder.
 - Developed, tested, and applied code to conduct numerical simulations.
 - Analyzed and interpreted data from simulations using statistical methods.
- 2001 - 2008** **Teaching Assistant**
Syracuse University, NY, USA

Personal Info

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LinkedIn

linkedin.com/in/berodriguezmilla/

GitHub

github.com/brodriguezmill

Medium

medium.com/@brodriguezmill

Twitter

twitter.com/brodriguezmill

Coding

JavaScript

TypeScript

Python

C/C++

HTML/HTML5 - CSS/SASS - PHP

Node.js

React.js

Vue.js

Jest

MySQL

Git

Bash

Libraries

Scikit-learn

Pandas

NumPy

Matplotlib

SciPy

Skills

Software Development

Data Analysis

Taught multiple recitation or lab sections of undergraduate physics and math courses for non-science majors.

Scientific Computing

Project Management

Grant Administration

Educational Outreach

Education

2001 - **Ph.D. in Physics - Syracuse University, NY, USA**
2008

2001 - **M.S. in Physics - Syracuse University, NY, USA**
2005

1997 - **B.S. in Physics - Universidad Autonoma de Zacatecas, Mexico**
2001