My links

# **EDUCATION** Mathematical Engineering (Ingeniería Matemática)

2014

Instituto Politécnico Nacional (IPN)

(National Polytechnic Institute)

Escuela Superior de Física y Matemáticas (ESFM)

# COMPUTER SKILLS

Languages & Software: Python, Django, Node/JavaScript, C++, JavaScript, Matlab, Octave, R, SQL, Firebase, Mathematica, Git, LaTeX, Excel, Word, AWS.

## **EXPERIENCE** Zapier

Jun 2022 - Aug 2023

- Developed backend solutions using Node and Python, including the Django framework using AWS services for scalable cloud infrastructure.
- Integrated a wide array of APIs, enhancing application connectivity and functionality.
- AWS was used for infrastructure.

### The Sip Club

Jan 2022 - Present

- Engineered both frontend and backend systems using JavaScript and TypeScript, leveraging technologies such as Builder.io, Plasmic, Vercel, GitHub, NX, and Redis to improve service integration and scalability.
- Implemented a dynamic shopping cart system, utilizing planetscaleDB for database management, which increased user engagement and sales.

NetProtect Feb 2020 - Jan 2022

 Led the development of frontend and backend systems for VPN services using Django, enhancing user experience and security using AWS for infrastructure

FunnelAI Jun 2019 - Feb 2020

- Created analytics dashboard using React.
- Transitioned from Spring MVC / Grails to Gatsby (React), and Graphene (Python and GraphQL) as well as using AWS Cognito for secure authentication, elastic load balancer, elastic beanstalk, and route53.

### Viridis Learning

May 2019

 Assisted in debugging and development in both an Angular (frontend) and Node (backend) for the Viridis learning platform, utilizing Python for data processing and analysis.

Suscribe.la Nov 2018

■ This is a side project of mine where I emphasize the usage of serverless technologies, as well as unifying everything in a UX based on Gatsby, which in

eTailligence Jul 2018 - Oct 2018

 Developed a system of scrapers for website data collection; the foundations of the Vue.js UX and standardized frontend and backend development workflows using Docker. Used Django for the backend.

Used Google Cloud Platform for infrastructure.

### clinicamia | Quody

2017

- Explored DENUE's (public business statistics) data to estimate potential market size for a health-related SaaS.
- I created a system to measure conversions in a massive email campaign.
- I designed a prototype of clinicamia
- I managed and collaborated in the creation of Clinicamia's MVP (Scrum Master).
- I used Trello, Node.js, Angular.js, Firebase, Python, Twilio, SendGrid, planning poker, Slack (and some bots).

# Programmer, Data Analyst

June 2015 - April 2017

**AVirtual.mx** | Quody

■ I developed and upgraded AVirtual.mx infrastructure and systems using PHP, Python, JavaScript, Bootstrap, MySQL, Bash, AWS, Mailchimp.

**Quody** March - June 2016

Created parties and candidate preferences reports (mentions and basic sentiment analysis mainly).

• I used Mention, Google Docs.

JustLegal April - Oct 2017

- Developed and maintained applications using Django, Django REST framework, and Wagtail within Docker containers, significantly improving deployment processes and application reliability.
- Automated data gathering and processing tasks with Python, enhancing operational efficiency and data accuracy.
- Used AWS services for scalable cloud infrastructure, including EC2, S3, and ELB and route53.

# **Head of Department, Programmer, Data Analyst** June 2015 - March 2017 **Secretariat of Government Innovation of the Government of Sinaloa State**

- Data analysis of a temporary and recurrent call center for government processes in rural, remote places.
- Created a site to promote technology education in poor and remote places.
- Created visualizations using INEGI's and INE's geometries to generate stratified surveys to a specified level (block, urban/rural ageb, city, etc). For this, I used Google Maps (and its APIs), MySQL, Excel, Shpescape, Google Fusion Tables, etc.
- I used R statistical language to analyze INEGI's intercensal data to model Sinaloa subpopulations' preferences.

- I created a system to create surveys. It used INEGI's intercensal data and it enriched it with the collected data.
- I used PHP, Python, JavaScript, MySQL, Bash, Excel/Google Spreadsheets, Pandas, AWS, GCE, Bitbucket, Git.

### Programmer 4ward Technologies

Jan - June 2015

- Developed application components for monitoring cattle and administering online exams, utilizing Python and JavaScript for backend and frontend development.
- Employed Angular.js for dynamic web applications and MongoDB for data management, enhancing operational efficiency and user experience.

#### **Mathematics Research Assistant**

2014

# Mathematics Department, Escuela Superior de Física y Matemáticas (ESFM)

- Comparative analysis of stochastic evolutionary methods for real-valued function optimization.
- I used Octave, MATLAB & Lagrange II used Octave, MATLAB & Lagrange II used Octave, matching is statistics, evolutionary algorithms.

MustacheCloud 2013

- I unified and centralized excel data of a client using Google spreadsheets and Google Apps Script.
- I automated the saving process of certain tickets and documentation in the client's emailing system using Google Scripts and Google Drive.
- I used Google Apps Script, Google Spreadsheets, JavaScript, PHP & Python.

### VOLUNTARY SERVICES

- I was a jury in NASA's Space Apps Challenge in Sinaloa.
- I helped applying and checking exams at Pierre Fermat contest (a national-level math contest in México) 3 times.
- I trained a small group of students for the OMI (Mexican Olympics in Informatics) 2008. One of them won a bronze medal that year.

# OTHER ACTIVITIES AND SIDE PROJECTS

- Completed courses in Machine Learning from Stanford University and Data Science from Johns Hopkins University at Coursera. More info can be found on my LinkedIn profile.
- I enjoy programming simulations of stochastic processes and simulation in general.
- Participated in the nationals of the Olympics in informatics in México during high school.
- I speak English fluently and understand French at an intermediate level, though I do not speak it fluently.
- Developed playeras de memes: A t-shirt store for me to experiment with several technologies and e-commerce.
- Created chamba remota: A platform where I help other people identify remote jobs.
- Established bulletninja.com: A personal blog, and a place for me to experiment with new ideas.