Rodríguez-Cárdenas Daniel Humberto

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- i Born in Bogotá, Colombia on October 12, 1985 (35 years old)
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- github.com/danielrcardenas

MSc. Candidate in Systems Engineering and Computer Science with four years of experience as a Software and Artificial Life Researcher, including two years of research on self-assembly of software, artificial chemistries, and two years applying complexity research on software simulation. JAVA/J2EE, python developer. Postgres geo-database implementer and Geographic Information System experience over leaflet and ESRI platform. SOLID principle fan and promoter. Software Engineer, mainly on back-end solutions for multiple public and private companies. I started my experience at petroleum and gas companies. I worked on an ML project for deforestation detection and land use, automating report generation, increasing frequency from 1 to 24 every two years, and reducing nearly 40% cost on manual analysis



EXPERIENCE

Present July 2019 Bogotá, Colombia

Principal Software Engineer, PRODIGIOUS,

Nissan web page API developer, improve software development process quality by 10% of production, automation test implementation. Develop API features for car configuration to improve user experience.

- > Build configurator car Core Services API.
- > Build back-end endpoints using Java and Spring framework.
- > Architectural discussions to build products design.
- > Continuous integration/delivery with Jenkins, Bamboo and AWS.
- > Support test process by implementing python scripts to extract and mock data.
- > Backward compatibility test support using rest assured framework.
- > Knowledge sharing through Team Learning sessions, technical talks and pair programming sessions.

| Java 1.8 | Apigee | Python | Postman | Confluence | Jira | Jenkins | Bamboo | Maven | Git | Amazon Web Services |
|----------|--------|--------|---------|------------|------|---------|--------|-------|-----|---------------------|
| Docker | | | | | | | | | | |

July 2019 **February** 2016 Bogotá, Colombia

Senior Software Engineer & Researcher, NUESTRA SEÑORA DEL ROSARIO UNIVERSITY,

I worked at the innovaction research center https://www.urosario.edu.co/Escuela-de-Administracion/Centros/Centro-de-Innovacion/Presentacion/. At the beginning is was a big challenge to get to feel confident enough with my job in the team. I had to learn and work with doctorated professors to solve hard problems in logistics and social science projects. I directed 3 agent-based simulation workshops for internal and external students. I prepared material for programming classes. I introduced computer science concept to the innovation research.

- > EdX MOOC material and classes preparation and teaching.
- > Agent-based simulation research.
- > Tool develop to improve subject and room assignation by solving Time Table Problem.
- > Logistics problems solution using metaheuristics and evolutionary computation.

Agent-based simulation Netlogo Anylogic Repast Java MongoDb Git Trello Research

February 2016

Geographic Software developer, Colombia Environment Ministry & Colombia Natural Conservation Parks ,

December 2014 Bogota Colombia

Geographic and spatial database administrator, web developer for cartography visualization on the web. Geographic services integration and programming. https://mapas.parquesnacionales.gov.co.

- > Front-End development using ESRI API.
- > Development of the Back-End using python for geographic analysis..
- > 90% of geo-processing integration and automation.
- > Cloud servers migration.
- > Relational database in Postgres.
- > ESRI tools integration
- > Development software coordinator

 Java
 Python
 Google cloud
 Javascript
 GIT
 ESRI API
 Postgres
 Postgis
 Cloudflare
 Sentry

May 2014 January 2012 Bogota Colombia

IT Project Manager, DATUM INGENIERIA LTDA,

I was in charge of generating the technical software proposals, once the projects were approved I lead the projects from the technical perspective.

December 2011 December 2010 Bogota Colombia

Systems administrator, support and Software Developer, DATUM INGENIERIA LTDA,

- > Participated in the analysis, programming, testing, and release of several Geographic Information Systems
- > Improve and organize raster and vector data improving near 70% data pro-cessing from satellite images
- > Trained end users about the use of the system giving them technical and functional support.
- > The whole deployment process was manual, I had to be responsible for setting up the product in RedHat Linux server.
- > Raster images classification based on geo-statistics

R Java Enterprise Edition (JEE) SQL Java Server Faces (JSF) EJB JPA Jasper Reports Oracle Data Base Oracle Spatial JBoss Application Server Lefleat

FORMATION AND AWARDS

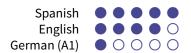
2018 - present MSc Systems Engineering and Computing [GPA: 3.6], Currently on thesis defending. Focused on evolutionary computation, Artificial life, bio-inspired optimization and software engineering. Master thesis is about self-organizing software code.

ACM GECCO scholarship, Scholarship to travel and expose the software refactoring recommendation system by using evolutionary computation at the GECCO conference in Kyoto, Japan.

2014 **BSc. Systems Engineer [GPA: 3.4]**, focused on Architectures and software development from the District University of Bogota FJC in Colombia. I obtained a degree with meritorious thesis for my research on implementing Web software architectures and geographic information integration for environment monitoring.

2014 **Esri Young Scholar Award 2014**, Award given at the Esri User Conference in San Diego CA, for developing a Geographic Information System to monitoring environment impacto form oil companies in Colombia

LANGUAGES



♦ Forces

- > I am very passionate about what I do.
- > I love challenges and I approach them in a positive way.
- > I am convinced that a team is more productive as a whole and not with isolated independent members, therefore I like to bring people to work together.

VIEWS AND INTERESTS

LIFE: Be happy and honest to myself, care about my family, respect others, be surrounded by good people and bring the best from them. That's what my life is made of.

Work: I am aware that work is the place where I am most of the day, therefore it is important for me to work in what I am

passionate for. Collaborating with my team bringing ideas and good attitude to build a product its also very important.

SPORT: I like Capoeira and love volleyball and swimming, I am basic skill on the guitar but I love playing.