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## Chemical Eng. Software Developer

### Jerson Mosquera Pretelt

Medellín - Antioquia

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[github.com/jemosdev](https://github.com/jemosdev)

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## Description

Engineer passionate about for chemistry and software development. Self-taught, responsible and committed person with excellent interpersonal relations. Chemistry Teacher between high school and university courses with research experience in heterogeneous photocatalysis. Proficiency in Python, Django and Databases.

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## Skills

HTML/CSS/JS, Python, Django, Flask, FastAPI, MySQL, PostgreSQL, MongoDB, Git/Github, Linux, AWS, Docker, English (B1).

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## Experience

### María Josefa Marulanda High School/ Chemistry Teacher

July 2015 - Present

Prepare course materials, homework assignments, and handouts. Evaluate and grade student's class work, laboratory performance and assignments.

### University of Antioquia / Auxiliary Professor - Researcher

January 2014 – December 2017

General chemistry and Organic chemistry teaching.

Prepare and deliver lectures to undergraduate students on topics such as organic chemistry and general chemistry.

### Research Group: "Applied Physicochemical Processes" 2014 – 2022

Lead research projects, programming and carrying out experimentation and writing articles.

#### Publications:

- *Integration of the straightforward and environmentally friendly sol-gel/solvothermal and photodeposition methods as a way to prepare highly photoactive Au/S-TiO<sub>2</sub> and Cu/S-TiO<sub>2</sub> materials. (2022)*
- *TiO<sub>2</sub>/spacer succinate films grafted onto nylon as a new approach to develop self-cleaning textile fibers that remove stains: a promising way to reduce reliance on cleaning water. (2022)*
- *Synthesis and Characterization of Photoactive S-TiO<sub>2</sub> from TiOSO<sub>4</sub> Precursor Using an Integrated Sol-Gel and Solvothermal Method at Low Temperatures. (2018)*

### Tablemac-Duratex S.A./ Production Engineer

June 2009 – February 2010

Responsible to ensure operative tasks were carried out under safe conditions. Generated reports of all impregnated paper quality.

Promoted actions for continuous improvement in the processes.

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## Education

### University of Antioquia / Master of Science in Chemistry

August 2017

### University of Antioquia / Chemical Engineering

June 2009

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## Courses

- Backend Development with Python and Django (Roadmap)- Platzi
- Frontend Architecture (Roadmap) – Platzi
- Terminal and command line – Platzi.