

# EDGAR GIOVANI MARTÍNEZ-MENDOZA

Mexico City, 07119 ◇ México

☎ +52-1-55-2316-3080 ◇ ✉ [edgarg.martinezm@gmail.com](mailto:edgarg.martinezm@gmail.com)

🌐 Web Page: <https://edgarmartinez.github.io/>

**Research Interests:** Pore-scale modeling, pore network models, flow and transport phenomena, image processing, percolation theory in displacement processes, reservoir modeling, reserves, risk analysis & management, machine learning, and data mining.

## EDUCATION

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**Universidad Nacional Autónoma de México**

*2016 - Current*

M.Sc. in Modeling

Advisor: [Dr. Martín A. Díaz-Viera](#)

GPA: 9.88/10

Expected to graduate in November 2018

**Universidad Nacional Autónoma de México**

*2011 - 2016*

B.Sc. in Petroleum Engineering

Graduated with Honors

GPA: 9.19/10

## EXPERIENCE

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**Visiting researcher**

March 2018 - May 2018

*University of Waterloo*

*Ontario, Canada*

- This stay addressed on multiphase transport in porous media and the open source pore-network modeling project, [OpenPNM](#). Supervised by [Dr. Jeff Gostick](#)

**Thesis Student**

2015 - 2016

*Mexican Petroleum Institute*

*Mexico City*

- Developing my undergraduate thesis: “Pore network models for obtaining effective flow and transport properties in petroleum reservoirs”. Directed by [Dr. Martín A. Díaz-Viera](#)

**Field Practice**

August 2014

*Petróleos Mexicanos (PEMEX)*

*Unidad de Perforación Comalcalco*

- Well Completion and Maintenance

**Field Practice**

December 2013

*Petróleos Mexicanos (PEMEX)*

*Unidad de Perforación Reforma-Ciudad PEMEX*

- Drilling Engineering

**Field Practice**

July 2013

*Petróleos Mexicanos (PEMEX)*

*Unidad de Perforación Litoral*

- Well Drilling Elements

## COMPUTER SKILLS

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**Languages** Python, Matlab, C++, Visual Basic

**OS** GNU/Linux, Windows

**Software** Inkscape, Gimp, Paraview, ImageJ, L<sup>A</sup>T<sub>E</sub>X

## LANGUAGES

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<b>Spanish</b>	Mother tongue
<b>English</b>	Upper Intermediate

## ORAL PRESENTATIONS

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**“Low Salinity Waterflooding Simulation via Pore Network Models: Salinity Impact on Capillary Pressure and Relative Permeability Curves”**, AIPM Technical Conferences, October 2018.

**“Fluid Flow Property Estimation Using a Pore Network Modeling Approach”**, The InterPore 10<sup>th</sup> Annual Meeting and Jubilee, New Orleans, LA. May 2018.

**“Comparative Study of Pore Network Modeling Software for the Characterization of Porous Media: OpenPNM and PoreFlow”**, Fourth Annual Meeting of Mexican Chapter of InterPore, November 2017.

**“Methodology for Porous Media Characterization at Pore Scale through Pore Network Modeling”**, Third Annual Meeting of Mexican Chapter of InterPore, October 2016.

**“Methodology for Obtaining Effective Flow Properties Employing a Pore Network Model”**, AIPM Technical Conferences, October 2015.

## GIVEN WORKSHOPS

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**“Visual Basic 6.0 for petroleum engineering students”**, Faculty of Engineering, Universidad Nacional Autónoma de México, March 2014.

## COURSES

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<b>C++ Intermediate</b> Computational Technology Program (PROTECO)	<i>January 2016</i>
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<b>MOOC Oil and Gas: From Exploration to Distribution</b> Institute Français du Pétrol	<i>June 2015</i>
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<b>Geological Modeling with PETROMOD</b> Schlumberger	<i>July 2014</i>
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<b>Advanced Drill Bit</b> Baker Hughes	<i>April 2014</i>
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<b>Introduction to PETREL</b> Schlumberger	<i>May 2013</i>
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## EXTRACURRICULAR

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- Member of the Student Society of Petroleum Engineers, 2013-2014
- Support in the Technical Program of CMP 2014
- Fundación TELMEX Scholar

## SOCIETIES

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- International Society for Porous Media
- Society of Petroleum Engineers
- American Association of Petroleum Geologists
- Earth-Science Modeling Group