

Pablo Alvarez

Personal Information

Date of Birth April 15, 1983 Nationality Canadian

Summary of Skills

Front-End JavaScript (React.js), CSS & Bootsrap, HTML5

Back-end Node (Express.js), Python (webapp2)

Visuals D3.js, R & Shiny, Python (Seaborn, Matplotlib)

Databases PostgreSQL, pgModeller

Office Git, Markdown, LATEX

EDUCATION

- 2017 2018 **Front-end Web Developer Nanodegree**, *Udacity*, Certification with courses built by Google, AT&T and Facebook, and taught by leading industry experts.

 Online, *www.udacity.com*.
- 2015 2018 Ph.D. Computational Earth Science, Université de Strasbourg, Development of numerical software designed to simulate physical processes in nature. Strasbourg, France.
- 2009 2011 M.Sc. Technology Engineering in Environmental Science, Technische Universität Hamburg-Harburg (TUHH), Computational simulation of hydrological systems. Institut für Umwelttechnik und Energiewirtschaft.

 Hamburg, Germany.
- 2002 2007 **B.Sc. (Honours) Global Resource Systems**, *University of British Columbia (UBC)*, Environmental Science and Resource Economics.

 Vancouver, Canada.

EXPERIENCE

Information Technology

Dec. 2018 - **Developer / ETL**, Senacor Technologies AG, Consultancy.

present o Developed and maintained ETL (Data Extraction, Transformation and Loading) mappings.

 PostgreSQL database creation, modeling and data integration based on business, functional and technical specifications. Jun. 2018 - Full-stack developer, inPact, Non-profit, Own Startup, www.people-inpact.com.

present O Deployed a responsive web application with user sign-in, fund-raising & blog capabilities.

- Implemented CSS-Bootstrap v4, HTML5, jQuery and JavaScript.
- Python backend running on **Google App Engine** (serverless application).

SCIENTIFIC

Nov. 2015 - Computational Research Hydrologist, PhD Candidate, Laboratory of Hydrology and Nov. 2018 Geochemistry of Strasbourg (LHyGeS), Strasbourg, France.

- o Developed and tested numerical software written in Python and R to evaluate contaminant fate in surface (soils & rivers) and subsurface (reservoir) environments.
- Designed a data acquisition program and managed interns during field and laboratory work.
- Published articles in leading scientific and engineering journals.

Industry

Feb. 2012 - Environmental and Safety Engineer, Wintershall GmbH, Germany & Netherlands.

Sept. 2015 • Technical lead, EHS communication software prototyping and implementation.

Developed performance tracking tools to assist international standard certification (14001, 50001).

LANGUAGES

English **Bilingual**, *Mother tongue*.

German Working proficiency, EU reference: B2-C1.

Spanish **Bilingual**, *Mother tongue*.

French Working proficiency, EU reference: B2.

AWARDS

- 2009 M.Sc Scholarship EU Commission. Value: €37,000.
- 2009 Canadian Research Council M.Sc. Research Stipendium. Value: \$25,500.
- 2007 University of British Columbia Charles & Jane Banks Book Price. Value: \$1,000.

Research Articles

- 2018 Pesticide degradation and export losses at the catchment scale: insights from compoundspecific isotope analysis (CSIA). Alvarez-Zaldívar, P., Meite, F., Payraudeau, S., Masbou, J., & Imfeld, G. Water Research, Vol. 139, pp. 198-207 (Aug. https://doi.org/10.1016/j.watres.2018.03.061
- 2018 Impact of rainfall patterns and frequency on the export of pesticides and heavy-metals from agricultural soils. Meite, F., Alvarez-Zaldívar, P., Alexandre Crochet, Wiegert, C., Payraudeau, S. & Imfeld, G. Science of The Total Environment, 616-617 (Mar. 2018). https://doi.org/10.1016/j.scitotenv.2017.10.297
- 2017 Fluorescent tracers to evaluate pesticide dissipation and transformation in agricultural soils. Lange, J., Olsson, O., Sweeney, B., Herbstritt, B., Reich, M., Alvarez-Zaldívar, P., Payraudeau, S. & Imfeld, G. Science of The Total Environment, 619-620 (Oct. 2017). https://doi.org/10.1016/j.scitotenv.2017.10.132
- 2016 Biogeochemical modeling of in situ biodegradation and stable isotope fractionation of intermediate chloroethenes in a horizontal subsurface flow wetland. Alvarez-Zaldívar, P., Centler, F., Maier, U., Thullner, M. & Imfled, G. Ecological Engineering, Vol. 90 (May 2016). https://doi.org/10.1016/j.ecoleng.2016.01.037