Alejandro Castellanos Alvarez Software Engineer | Application Developer IBM

Focused on developing and solving mathematical models; I enjoy working in teams with people from different backgrounds and especially interested in machine learning and parallel programming.

EDUCATION

2021 **Master in Computer Science**, Tecnológico Nacional de México Campus Cd. Madero, Tamaulipas, México. Certificate in process.

2018 Engineering in Computer Systems, Instituto Tecnológico de Cd. Madero, Tamaulipas, México.

EXPERIENCE

Present | Application Developer, IBM,

November 2021 | Functional analyst, focused on the design and development of solutions for the industry with Agile metho-

Java Oracle PL/SQL Spring Boot IVR Eclipse Maven Git

November 2021 | Application Developer, Accenture,

July 2021

Development, design and maintenance of technologies in line with business strategy.

> Maintenance and updating of web components.

> Functional analysis of requirements.

Java Oracle PL/SQL WebDynpro

August 2019 | Intern, LANTI-TECNM,

February 2018 | Configuration and adaptation of Institutional Repository for Tecnológico Nacional de México.

- > Adaptation and configuration of Dspace v6.3
- > Development of the Rest Api for repository statistics consumption.
- > Adaptation and configuration of the OAI interface.

 dSPACE | JavaServer Pages (JSP) | Flask | Java | Tomcat | Python

SKILLS

Programming Java (JEE), C/C++, R, Python, JavaScript, HTML5, SQL

Frameworks Spring Boot, Vaadin, JavaFX, dSpace, Flask, WebDynpro, OpenMPI, Weka

Database Oracle Database, MySQL, PostgreSQL, MongoDB.

IDE IntelliJ Idea, Eclipse, Visual Studio Code.

Middleware Nginx, JBoss, Apache Tomcat.

Office automation LaTeX, Pack Office (Word, Excel, PowerPoint).

\(\right\) Languages



+ STRENGTHS

- > Autodidact
- > Analytical
- > Responsibility
- > Abstract thinking
- > Teamwork

CERTIFICATIONS

- AWS Certified Cloud Practitioner, Amazon Web Services Training and Certification, https://www.credly.com/badges/d137c622-6e35-4373-8e9e-7787a0974597)
- 2022 Enterprise Design Thinking Practitioner, IBM, https://www.credly.com/badges/8068a3f0-f58d-40f2-8910-90931731dbdf
- 2022 IBM Agile Explorer, IBM, https://www.credly.com/badges/e3d18cec-6555-400a-9d49-7abcab309d47

Publications

- 2022 Castellanos A, Cruz-Reyes L, Fernández E, Rivera G, Gomez-Santillan C, Rangel-Valdez N. Hybridisation of Swarm Intelligence Algorithms with Multi-Criteria Ordinal Classification: A Strategy to Address Many-Objective Optimisation. Mathematics. 2022; 10(3):322.doi.org/10.3390/math10030322
- 2021 Castellanos-Alvarez A, Cruz-Reyes L, Fernandez E, Rangel-Valdez N, Gómez-Santillán C, Fraire H, Brambila-Hernández JA. A Method for Integration of Preferences to a Multi-Objective Evolutionary Algorithm Using Ordinal Multi-Criteria Classification. Mathematical and Computational Applications. 2021; 26(2):27. doi.org/10.3390/mca26020027

CONFERENCES

Alejandro Castellanos-Alvarez, Laura Cruz, Hector Joaquin Fraire Huacuja, Claudia Gomez, Jose Alfredo Brambila-Hernandez, Nelson Rangel-Valdez and Jesus M. Velasquez-Bermudez. A multi-objective optimization method to estimate parameters of the COVID SEIMR/R-S model with a case study of Mexico. Numerical and Evolutionary Optimization September 08-10, 2021