Mechanical Engineer & Developer
JOSUE BANEGA

I'm mechanical engineer with solid programming skills. I have four years of experience in the mining sector performing engineering analysis and product design using CAD/CAE tools and FEA/CFD simulations. I'm passionate about technologies and app development. I'm always learning about new ways to use the tech to solve problems and make the life easier.

Contact

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📍 Puerto Ordaz, Venezuela

📞 0424-9713321

🌐 http://jbanega.co/

in linkedin.com/in/jbanega

github.com/jbanega

Technologies

- Programming and data analysis: Python and MATLAB.
- 3D Modeling & Drawing: Autodesk Inventor and Solidworks.
- FEA and CFD Simulation: ANSYS, COMSOL Multiphysics and OpenFOAM.
- Web and App Development: HTML, CSS and JavaScript.

Soft skills

- Adaptability.
- Problem-solving.
- Creativity.
- Teamwork.
- Self-motivated.

Work experience

Jan 2019 – Jan 2021

LUFH CONVEYOR BELT SYSTEMS
Technical Department / Development & Application Engineer

- In charge of technical drawing and design of 3D components using CAD software as Autodesk Inventor, ANSYS and COMSOL Multiphysics.
- Develop engineering analysis tools with user interface to automate tasks and provide guidance to internal/ external customers. Technologies used: Excel, VBA and Python.
- Write analyses and prepare presentations about the results and work performed. Tools used: Microsoft Office (Work, PowerPoint and Excel).

Aug 2017 – Dic 2018

CVG VENALUM
Technology and Development Department /
Technology & Development Engineer Level I

- Perform hands-on concept development and prototyping to improve mechanical system using Autodesk Inventor, ANSYS and MATLAB.
- Running simulation based on finite element analyses (FEA) and computational fluid dynamic (CFD).
- Records and analyses data to reach design/ business decisions in plant.
- Interact with the experimental teams to develop and test new/ existing designs.

Education

2018 – 2019

MODELING AND SIMULATION SPECIALIZATION IN MECHANICAL ENGINEERING
Universidad Nacional Experimental Politécnica Antonio José de Sucre (UNEXPO)
Puerto Ordaz, Venezuela

2011 – 2016

BACHELOR DEGREE IN MECHANICAL ENGINEERING (SUMMA CUM LAUDE MENTION)
Universidad Simón Bolívar (USB)
Sartenejas, Venezuela

2002 – 2010

HIGH SCHOOL DEGREE IN SCIENCE
Unidad Educativa Colegio Los Próceres
Puerto Ordaz, Venezuela

Papers & Conferences

[1] Banega, J.; Moreno, N. (2018) Aerodynamic Design of a VAWT suitable to wind profiles of Paraguaná by CFD, Revista De La Facultad De Ingeniería, Universidad Central De Venezuela, 31(4), 83-92.
*Presented in The XIII International Congress of Numerical Methods in Engineering and Applied Sciences (CIMENICS 2016), Caracas, Venezuela, 11-13 July.

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Mechanical Engineer & Developer
JOSUE BANEGA

Profile

Birth date: 26 June 1993.

Nationality: Venezuela.

Languages

- Spanish: Advanced (Native).
- English: Intermedium – Advanced (B2).
- French: Basic (A1).

Interests

- Python programming.
- App development.
- Machine learning.
- Computational mechanics (FEM/CFD).
- Vibration analysis.

Hobbies

- Reading.
- Travelling.
- 3D Modeling.
- Cinema.
- Airplane crafting.

Teaching & Tutoring

[1] PhD. Caraballo, S.; Banega, J. (Dic 2018 – Jan 2019). Thermo-fluid-dynamic Simulation with COMSOL Multiphysics. Short course dictated as part of MODELING AND SIMULATION SPECIALIZATION IN MECHANICAL ENGINEERING VII Promotion.

Universidad Nacional Experimental Politécnica Antonio José de Sucre (UNEXPO)

Puerto Ordaz, Venezuela

[2] Bouzas, A. [Author]; Banega, J. [Industrial Tutor]; Andrade, J. [Academic Tutor] (2018) Modeling and Control of a Demolition Equipment to Clean Aluminium Melting Pots. Industrial training in CVG Venalum's Reduction Technology Division.

Universidad Nacional Experimental Politécnica Antonio José de Sucre (UNEXPO)

Barquisimeto, Venezuela

Certifications & Complementary courses

Jan 2021 — **GUI Development with Python and Tkinter**
Udemy / Online

Jan 2021 — **Computational Thinking with Python**
Platzi / Online

Aug 2020 — **English for Developers Course**
Platzi / Online

Jul 2020 — **Basic Python Course**
Platzi / Online

Mar 2020 — **Fundamentals in Polymer Processing**
Instituto de Capacitación e Investigación del Plástico y del Caucho (ICIPC)
Barranquilla, Colombia

Feb 2020 – Sep 2020 — **Certificate of Proficiency English Level B2**
Open English / Online

Oct 2019 – Nov 2019 — **Design Thinking**
Instituto de Estudios Superiores de Administración (IESA) / Online

Nov 2017 — **Temperature Control with Fuzzy Logic**
CVG Venalum / Puerto Ordaz, Venezuela

Sep 2015 — **ANSYS CFX – Introduction to V15.0**
ALBATROS Ingeniería & Construcción C.A. / Caracas, Venezuela

Jan 2011 – Jun 2011 — **French Foundation Course**
Lycée Saint Charles & American Field Service (AFS) / Marseille, France

Recognitions & Achievements

Oct 2016 — **Best Student Award, 2016 Edition**
Decanato de Estudios Profesionales de la Universidad Simón Bolívar (USB)
*Recognition by excellent academic performance.