

Juan David Aristizábal Cardona

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Profile

Process engineer driven to uncover opportunities for value creation and processes improvement, supported by frameworks like project and innovation management as well as theory of constraints.

Web developer willing to create solutions that address unmet needs in areas like education, project and innovation management, health and social coordination using Ruby, Rails, JavaScript, HTML and CSS.

Prepared to learn any tech-embedded systems, IoT and big data- that enables new approaches to address underserved needs.

Education

Coursera U of California Irvine, online Intro to IoT and Embedded Systems	Aug 2017- in progress
Make It Real¹, online Full Stack Web Development Bootcamp	2015-2016
Universidad de Antioquia, Medellín - Colombia Project Management Postgraduate Diploma	2012 - 2013
Universidad EAFIT², Medellín - Colombia Process Engineering Bachelor's Degree, <i>specialization in chemical process design</i>	2007 - 2012

Languages

English – Academic IELTS , overall score: 7	27 April 2013
Portuguese – Instituto de Língua Portuguesa	Jan 2014 - Dec 2014

Work Experience

Process Engineer – cofounder Sirexa Medellín - Colombia www.sirexa.com	2013-2017
Coordinate industrial B2B sourcing projects/operations and lead the creation of partnerships with stakeholders.	
Prepare reports based on trade data to draw insights and devise market strategies.	
Participate in industrial trade shows like Abrafati in São Paulo-Brazil to activate and sustain new ties with suppliers and clients.	
Junior full stack RoR developer, remote and part time Nominapp https://www.nominapp.com/	2016
Contributed to the evolution of the web platform - devoted to payroll management for SMEs - using Ruby on Rails, Git, Javascript, JQuery, Bootstrap, CSS and HTML.	
44 pull requests dealing with front end and back end issues like:	
- Reordering layouts and creating landing pages	
- Tracking registries through Google Apps Script and adding migrations to db to record new incoming information	
- Crafting JS and jQuery scripts e.g. calculate legal digits as user is entering his information inline	

¹ RoR / Junior full-stack developer / Make it Real

² Process Engineering / Bachelor's Degree / Universidad EAFIT

- Analyzing the source of differing payroll values in some parts of the app
- Making views responsive
- Creating MVC implementations e.g. show companies historic for paid novelties
- Adding on existing back-end functionality e.g. implement single employee mailing
- Fixing UI/UE issues

Used git/github, trello, toggl for team collaboration.

Projects Analyst - Intern

2011 - 2012

Compañía Nacional de Chocolates - Grupo Nutresa
Rionegro - Colombia
www.chocolates.com.co

Evaluated projects financially and technically - to enable overall costs savings for up to USD 1,15 MM and increase productivity in several productive lines. Generated financial statements as well as project indicators such as net present value, return on investment and payback period and provided analysis based on these measurements.

Reported the advance of eight ongoing projects to both the Engineering Director and the Manufacture Process Leader.

Planned and executed a project to replace a bucket elevator in one of the most important productive lines in the Company. It was a USD 15,000 project undertaken within the budget, which accurately met the quality and occupational requirements.

Introduced entering interns in project formulation and evaluation.

Side Projects

2013

Developed a feasibility study oriented to improve the performance of the productive process for a manufacturer of liquid biodegradable detergents. In the feasibility study, we conducted studies related to technical issues, financial evaluation, risk management, market research, environmental impact and legal aspects.

Currently

Co-founder at Sirexa, where currently I am trying to leverage our business model and look for new partnerships.

Broadening my knowledge about agile product development.

Evaluating if it would be worthwhile to work on a couple of startup projects e.g. a project management platform for distributed teams. Saw this problem when working at a manufacturing organization and talking with local government authorities, both lacking a tool to track how well projects were advancing.

Bachelor's Degree Research

Characterization of secondary metabolites produced by *Pouteria caimito* in its leaves.

2011 - 2012

Presented the conclusions of the project at the annual Process Engineering fair, as well as defended the thesis in an open lecture, where my co-worker and I reported for the first time the presence of a mixture of isomeric triterpenoids, a fatty acid ester of triterpenoid along with some waxes, isolated from *Pouteria caimito* leaves collected from the Chocó forest in Colombia, a region well known for being one of the highest centers of biodiversity on earth.

Preliminary identification of tannins compounds from the leaves of *Acacia mangium*.

2012

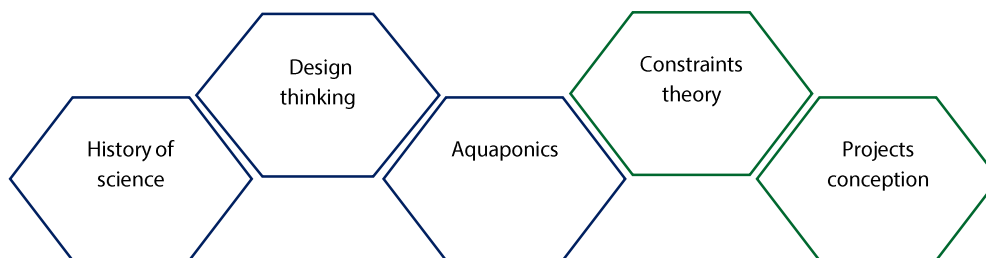
Conducted primordially scientific database research to determine the state of the art of identification techniques for tannins compounds and their occurrence in the *Acacia* genus, as well as devised a roadmap to perform some preliminary experiments and presented the procedures to the interested sponsor.

Evaluation of the operational conditions to reduce the COD in gray water by the Photo-Fenton process.

2011

Evaluated the effect of Fe^{+3} and H_2O_2 concentration on the degradation rate of organic matter using a 3^2 factorial experiment design and analyzed statically the outcomes with Statgraphics Centurion. Furthermore, the best treatment was selected and a kinetic behavior was reported for 3 hours of reaction achieving a 69% of organic matter degradation.

Interests



Some tools

STATGRAPHICS

Analyzed statically the results from sets of experiments to determine significance of variables and identify optimal conditions of processes.

MS PROJECT

Planned projects while working at Compañía Nacional de Chocolates and scheduled activities for feasibility studies.

MS VISIO

Designed PFD and P&ID of chemical processes based on the ISO 10628 and ISA-S5-1 standards.

MATLAB

Programmed codes to solve mathematical algorithms in the fields of thermodynamics.

POLYMATH

Solved differential equations in the area of reactors design and graphically interpreted the advances of reactions.

HYSYS

Simulated chemical processes under several scenarios and interpreted the relations among different variables.

MS EXCEL

Used it to evaluate projects with financial models.

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August 2017