

# JANELLA YAR VALENZUELA

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## Aspiring IT PROFESSIONAL (CHEMICAL ENGINEER)

Result-oriented chemical engineer with 5+ years of working experience in research and development within materials, solutions, and chemical industry. Seeking an entry-level position where I can grow and learn from experienced members in computer programming. I am adaptive person in new work environment and offer a strong analytical background and entry-level coding skills in MATLAB and Python. Recently accepted into Georgia Tech Coding Bootcamp, will assisting part-time.

## TECHNICAL SKILLS

**Software:** MATLAB +Simulink, Python (beginner), Aspen Plus, ChemDraw, AutoCAD (2D), Autodesk Inventor (3D), Microsoft Office Suite, Google Drive, Labware, Lotus notes, DoE, Tecan, HPLC, Minitab

## AREAS of EFFECTIVENESS

Problem Solving, Critical Thinking, Bilingual (Spanish/English), Data interpretation and analysis, Technical writing, Process Optimization, Customer Service, Leadership, Teamwork, Troubleshooting, Time Management

## PROFESSIONAL EXPERIENCE

### Solvay Specialty Polymers - Alpharetta, GA

02/2020 – 01/2023

#### Production Engineer II

- Optimized existing formulation and processes to improve product performance, process robustness and safety while reducing costs.
- Plan and design research projects; specify the problem and define the project scope using Sig Sigma methodologies.
- Worked with management to evaluate future projects and align with critical path schedule requirements.
- Generated engineering and technical documentation to facilitate product development collaboration.

#### Production Engineer I

- Develop and implement prototypes and programs to explore and evaluate concepts, which can serve as proof-of-concepts and demonstrations and can be used to run evaluations and collect data.
- Collaborate daily with a principal scientist to provide technical support for manufacturing sites, improve current manufacturing processes, and develop novel manufacturing processes.
- Analyze Engineering results and proposes product changes to determine feasibility, improvement of component and systems, and functional and performance specifications.

### American Heritage Biomass LLC- Georgia Tech Renewable Bioproducts Institute

08/2011 – 01/2020

#### Research Specialist

- Combine and leverage my knowledge of chemical engineering and polymer science to aid the design and execution of experiments that gather comprehensive data on the synthesis and processing of polymers.
- Designed an experimental procedure to determine the chemical and physical properties of the pineapple biomass known as bromelain.
- Identified cost-effective recipes containing 100% of natural, bio-based, and biodegradable ingredients yielding potential savings of 63%.
- Apply statistical methodologies to process collected experimental and analytical data and inform the next steps in the design process

### Import Trading LLC- Georgia Tech Renewable Bioproducts Institute

08/2018 – 05/2019

#### Research Technician

- Proposed a future bio-based, biodegradable, compostable and recyclable spoon to be able to diminish pollution, decrease animal death in oceans and other environments and biodegrade 200 times faster than current plastic spoons.

- Established a protocol to evaluate and select sustainable alternatives for the replacement of synthetic and non-biodegradable silverware.
- Performed experiments that involved injection molding and stress tests to find alternatives for flatware.
- Identified sources of funding to prepare research proposals and submit funding applications.
- Advised or assisted in obtaining patents or meeting other legal requirements.

## **EDUCATION & ACHIEVEMENTS**

Georgia Institute of Technology - *Bachelor of Science in Chemical Engineering* | 2019

- Dean's List – 2015-2019
- Graduated with Honors
- 2019 Capstone Winner for Chitin Nanofiber production; a bioplastic alternative, sponsored by Niagara Water

Lean Six Sigma Certifications

- White Belt
- Yellow Belt
- Green Belt (in progress)

Pulp and Paper Certification | Georgia Institute of Technology July 2019