Fausto J. German Jimenez

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Education

The University of North Carolina at Charlotte, 2022 (Expected), Charlotte, NC

Bachelor of Science in Computer Science (GPA: 3.91 of 4.0)

Degree Concentration: Data Science

Relevant Courses: Data Structures and Algorithms, Data Mining, Logic and Algorithms, Natural Language

Processing, Visual Analytics, Computer Vision, Cloud Computing for Data Analytics Honors: Dean's List: Spring 2021; Chancellor's list: Fall 2020, Fall 2021, Spring 2022 Programs: Early Entry (Accelerated Master's) Student (Program GPA: 4.0 of 4.0)

Rowan-Cabarrus Community College, 2020, Salisbury, NC *Associate of Science in Computer Science (GPA: 3.58 of 4.0)*

Relevant Courses: Intro to Prog & Logic, Java Programming, Calculus I, Calculus II, Linear Algebra

Honors: Graduated with honors in 2020

Research Experience

OUR Research Scholar — *The University of North Carolina at Charlotte*, Charlotte, NC JANUARY 2022 - APRIL 2022

- Researched different machine learning methods and techniques using PyCarent and Scikit-Learn to develop a predictive model for aflatoxin insurance claims in the U.S. based on temperature data
- Developed an abstract and poster presentation to summarize the results of the research

Undergraduate Research Assistant — *The University of North Carolina at Charlotte*, Charlotte, NC AUGUST 2021 - DECEMBER 2021

- Developed the different parts of a web application that will serve as the primary platform for collecting crop-field data from farmers to train machine learning models, using Vue.js as the development framework
- Programmed a connection between the platform's front-end and back-end for user authentication and to display dynamic content, using Axios.js to communicate with RESTful APIs

Personal Projects

U.S. Currency Recognition (2022) — A Computer Vision Project

Executed a complete computer vision project, from data collection and labeling to model selection and training, resulting in an object detection system that could identify U.S. currency in images and live video. https://github.com/faustotnc/us-currency-recognition

Ranker (Beta, 2022) — A PageRank Visualization Tool

Designed and developed a tool that could be used by students and practitioners alike better understand the PageRank algorithm, using web development technologies like React, Redux, and Cytoscape-Js. https://ranker.faustogerman.com

Hinton (Alpha, 2021) — An Interpreted Programming Language

Engineered and implemented a multipass compiler and a stack-based virtual machine for the "Hinton" interpreted programming language, using Rust as the implementation language. https://github.com/hinton-lang/Hinton

Personal Website (2020) — A Portfolio Website

Designed and developed the 7th iteration of an "about me" website using advanced web development technologies like Angular 2+, Typescript, and Three.js to showcase web development skills. https://github.com/faustotnc/portfolio_website

Poster Presentations

In Search of a Predictive Model for Aflatoxin Insurance Claims Based on Temperature Data. April 21, 2022. Undergraduate Research Conference at the University of North Carolina at Charlotte, Charlotte, NC.

Honors & Awards

Undergraduate Research Conference Award (2022) — *The University of North Carolina at Charlotte* Recipient of the Math and Computer Science Poster Presentation Award at UNC Charlotte's Undergraduate Research Conference

SPARC Scholarship (2019) — Rowan-Cabarrus Community College

Recipient of the SPARC scholarship from the Rowan-Cabarrus Community College starting in the fall semester of 2019 until the spring semester of 2020

National Society of Leadership and Success (2019) — *Rowan–Cabarrus Community College* Inducted member of the Sigma Alpha Pi chapter since 2019

Phi Theta Kappa Honor Society (2018) — *Rowan-Cabarrus Community College* Inducted member of the Beta Tau Theta chapter since 2018

Technical Skills

- General Programming: Python, TypeScript, JavaScript, Java, Rust
- Data Science: Pandas, Numpy, Scikit-Learn, Altair, TensorFlow, SQL
- Web Development: React, Angular 2+, Vue.js, Axios, Threejs
- Compiler Theory (Beginner): Stack VMs, LL(1) Parsers, Bytecode Compilers, ASTs