

Jose Daniel Garcia Carrillo

☎ +52 1 33 3409 9667 • ✉ daniel95@rams.colostate.edu • 🌐 RetroDISTORT
in daniel-garcia-rd • 🌐 retrodistort.github.io




Education

- **Colorado State University** **Fort Collins, CO**
Graduated May 2022
 - *B.S. Computer Science*
 - **Relevant Coursework:** Software Engineering, Machine Learning, Big Data, Object Oriented Design, Operating Systems, Algorithms and Optimization, Low-Level Programming, Compilers, Database, Computer Architecture, Assembly
- **Front Range Community College** **Fort Collins, CO**
Graduated May 2019
 - *Associates of Science*
- **CETI Colomos** **Guadalajara, Jal**
Graduated May 2015
 - *Recognition as a Technologist in Automation and Instrumentation*
 - **Relevant Coursework:** Digital Circuits, Instrumentation, Technical Drawing, High Power Circuits, PLCs, Microcontrollers, Pneumatics, Hydraulics, Process Controls, Industrial Robotics, Industrial Calibration, Thermodynamic Processes

Technical Skills

- **Programming Languages:**
 - Procedural Bash, C, Matlab, SQL
 - Object-Oriented C++, C#, Java, **JavaScript**, Python, MicroPython, VB, Rust
 - Functional Scala, Lisp, Emacs, **LaTeX**
- **Libraries and Frameworks:**
 - Web Based ReactJS, NodeJS
- **Mechatronics:**
 - Microcontrollers Pic, Atmel, Xtensa, ARM
 - PLC Allen Bradley, Sismatic
 - Communication SPI, CAN, I2C, I2S, BLE, WiFi, RS232, Sockets, Websockets, WebRTC
 - Other Skills 3D printing, SMD soldering, Electronics Diagnostics, CNC Routing, Pneumatics, Hydraulics
- **Software:**
 - Automation & Design FluidSIM, AutoCAD, RSLogix, EasyEDA
 - Other Unix-based OS, Emacs, Windows, Git

Work Experience And Notable Projects

- **Hardware and Software Engineer — Research and Development** **Fort Collins, CO**
Jan 2022 – Jul 2022
 - *Colorado State University and Vaisala*
 - Undergraduate Electrical and Computer Engineer, Radar Data Acquisition Development and Design
 - Worked with GPS-synchronized broadband data acquisition system for earth science applications
 - Achieved to designed and develop the prototype for high speed data analysis with reduced design complexity
- **Pi Bot** **v3.0.0 Released Aug 2022**
 -  *Github.com/RetroDISTORT/Pi-Bot*
 - Designed a modular Raspberry Pi-based robot with machine learning capabilities through WebRTC (video/audio)
 - Includes capability for remote access through web-sockets or the mobile friendly web-app
 - Built with Python written applications such as web radio, music spectrum analyzer, Bluetooth speaker, and more
- **Dawn and Dust** **v2.1.0 Released Jun 2021**
 -  *Github.com/RetroDISTORT/Dawn-and-Dust*
 - Android game made with game maker studio using a version of C#
 - Achieved to build a top-down-view puzzle game with google play integration
- **Smart Watch** **v3.0.0 Released Jan 2021**
 -  *Github.com/RetroDISTORT/Smart-Watch*
 - ESP32-based smartwatch for IoT, testing, home automation, mobile apps, and more
 - Designed from the bottom-up using C and micro python for the applications and AutoCAD for the case
 - Successfully built a working prototype from component selection and PCB design to coding applications