Diego Díaz

Curriculum Vitae

Personal Information

I am an electronic engineer and mathematics student interested in applied mathematics, specifically in statistical learning theory, information theory, signal processing and computational algebraic topology. I am passionate about music, writing songs and playing guitar.

Education

Pontificia Universidad Javeriana, Bogotá

2018–2023 B.S. in Mathematics

 $\label{eq:definition} \mbox{Degree thesis: } \mbox{An uncertainty principle for functions with symmetries over finite fields.}$

Advisor: Jesús Alonso Ochoa Arango.

Department of Mathematics.

2017–2022 B.S. in Electronic Engineering

Degree thesis: Piecewise linear signals for analog order filters.

Advisors: Alfredo Restrepo Palacios and Jesús Alonso Ochoa Arango.

Department of Electronic Engineering.

Schools Attended

Jun, 2022 International Workshop in Applied Statistics and Data Science, UTB, Cartagena de Indias.

Jun, 2022 Encuentro Colombiano de Combinatoria (ECCO), Universidad de los Andes and Universidad Sergio Arboleda, Bogotá.

CIMPA Research School: Geometric methods in combinatorics.

Honors and Talks

Apr., 2023 Degree thesis presentation, Jornada Interuniversitaria de Matemáticas, Universidad Nacional de Colombia

Sep, 2022 Honorable mention in degree thesis, Electronic Engineering.

Projects and Experience

Experience

Nov-May, 2023 Internship, Management Solutions.

Jul-Nov, 2022 Instructor in mathematics, assistant for all majors, calculus, linear algebra, probability and discrete mathematics.

Engineering Projects

Jul-Nov, 2020 **Hand keypoints detection**, implementation of computer vision algorithms for detection of phalanges, knuckles and other keypoints.

Developed with: Python in Google Colab.

Jul-Nov, 2020 **Real-time detection and classification of face masks**, face detection by means of computer vision algorithms and mask position classification via CNN's.

Developed with: Python in PyCharm IDE.

Skills

- \circ Programming: Python, C, Matlab, \LaTeX , SQL.
- o Languages: Spanish (native), English (fluent), German (basic).