

ALEJANDRO CIUBA

Address: 8 Riverside Drive, Hawley, PA 18428

Phone: (412) 874-1838 • Email: alejandrociuba@gmail.com

LinkedIn: alejandro-ciuba • Github: AlejandroCiuba

Professional Profile

I am a 3rd year undergraduate student pursuing a major in computer science with minors in Spanish and linguistics. I possess a wide range of computer science skills ranging from experience with various popular languages like Java, Python and C, to familiarity with useful tools/applications such as the Selenium IDE and the Git/Github ecosystem. I am also comfortable in many OS environments, having years of experience using Windows, Ubuntu, and MacOS. In regards to linguistics, I have taken a wide range of courses which has given me a great breadth of knowledge in the field. My main focuses include: natural-language processing, corpus linguistics and internet sociolinguistics. I am also currently doing two research projects: one on [Sociolinguistics in Video Game Dialogue](#), and another organizing the [PELIC Speech Dataset](#).

Skills

Spanish

- Conversational in Spanish
- Has translated technical math documents into the language
- Tutored math and computer science in the language

Programming

- Languages: Java, Python, C# (Unity Game Engine), C++ and C with Makefiles
- Java Experience: JUnit, Gherkin + Cucumber, through both the Eclipse IDE and terminal
- Python Experience: NLTK, SKLearn, Matplotlib, Pandas, Numpy, Pickle through scripts, shell and Jupyter Notebook environments

Mathematics

- Knowledge of Statistics, both descriptive and inferential
- Knowledge of Calculus: derivatives, integrals, differential equations, multivariable problems, etc.
- Knowledge of Linear Algebra through computer graphics: matrices/vectors and their operations
- Knowledge of Formal Language Theory: Automata & Grammars, Chomsky Hierarchy, Complexity Classes, etc.

Other Skills

- Experience with Git and Github in individual, team and organization settings
- Currently uses a Linux environments (Ubuntu)
- Experience with VMWare and OpenVM
- Knowledgeable with LaTeX using Texmaker
- Experience using OpenGL with C libraries

Experience and Personal Projects

[Linguistics Data Science Research](#), Pittsburgh, PA

January 2022 – Present

Research Assistant for Dr. Alan Juffs and Dr. Na-Rae Han

- Aides in the clean-up of the unpublished *PELIC Speech Dataset*
- Organizes the data through searching the organizations archives and connects data points together
- Uses Python to create and run scripts/programs to better manage the dataset

[Sociolinguistics Research](#), Pittsburgh, PA

February 2022 – Present

Research guided by Dr. Na-Rae Han for Spring 2022 “Data Science for Linguists” Class

- Gathered data from previously establish Github repository and reformatted for research use
- Extracted raw data from games using custom-parsing scripts
- Applies sociolinguistic knowledge onto video-game dialogue

Teaching Assistant, Pittsburgh, PA

August 2021 – Present

Teaching Assistant to Professor John Ramirez at the University of Pittsburgh

- Instructs recitations with upwards of 20 students on algorithm and data structure concepts
- Manages exercises given by Dr. John Ramirez and walks through solutions
- Assists students one-on-one during office hours

Provost Academy Leader, Pittsburgh, PA

May 2020 – Present

Councilor in The Provost Academy Program

- Helps plan and monitor activities virtually and in-person for incoming first-year students
- Advises and helped first-year college students in scheduling and resident-life
- Maintains connections with first-year students throughout the year via wellness checks

Flatland: The Game, Pittsburgh, PA

September 2020 – November 2020

CSC Hacks 2020 Winner + Best Beginner Project

- Created a 2D arcade-style shooter with retro effects for CSC Hacks 2020
- Used the Unity Game Engine and C# to program the game in 6 weeks
- Made all assets in Aseprite and used LMMS to make the game's music

Carnegie Library ESL Volunteer Instructor, Pittsburgh, PA

August 2019 – March 2020

Volunteer Teaching Assistant for Carnegie Public Library ESL Class

- Assisted main instructor with lesson plans
- Guided adult learners through vocabulary and grammar exercises
- Worked one-on-one with students to ensure they were able to practice their English in a safe environment

Education

University of Pittsburgh, Pittsburgh, PA

Anticipated Graduation Month: April 2023

Bachelor of Science in Computer Science

GPA 3.96

Minors: Spanish, Linguistics

Relevant Coursework for Computer Science: Data Structures and Algorithms I & II, Systems Software, Computer Organization & Assembly Language, Introduction to Computer Graphics, Software Quality Assurance

Relevant Coursework for Mathematics: Calculus I & II, Introduction to Statistics, Discrete Structures, Computational Methods

Relevant Coursework for Linguistics: Introduction to Linguistics, Introduction to Sociolinguistics, Introduction to Computational Linguistics, Introduction to Translation Theory*, Data Science for Linguists, Overview of Spanish Linguistics*

*Course taught in Spanish

Hobbies and Interests

University of Pittsburgh Spanish Club, *Vice President & Mesa Coordinator*

August 2019 – Present

University of Pittsburgh Computer Science Club, *Member*

October 2020 – Present

Interest in Natural-Language Processing

August 2021 – Present

Interest in Computer Graphics and Game-Engine Design

August 2021 – Present