

# Jonathan J. Allarassem

804-773-9764 | AllarassemJJ20@gcc.edu/ [allarassemjonathan.github.io](https://github.com/allarassemjonathan)

## EDUCATION

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### Grove City College, Grove City, PA (ABET accredited)

*Bachelor of Science in Computer Science* (Expected 2024) GPA 3.84

Selected Coursework: Computer Programming I, Computer Programming II, Database Management System, Data Structures and Algorithms, Statistical Methods, Discrete Math and Applied Probability.

## SKILLS

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*Programming/Scripting Languages:* Java, Python, C/C++, MySQL, HTML, CSS, PHP, Wolfram Language, MATLAB, Octave Language.

*Frameworks and tools:* Eclipse, Sublime Text, Python IDE, Mathematica, Microsoft Workbench, GitHub, Nano, ARDUINO IDE, Adobe Creative Cloud, Photoshop, Adobe Bridge, Adobe Illustrator, InDesign, Ubuntu Linux.

## EXPERIENCE

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### Research Student

*Summer 2021*

- Developed an application (in Python) that generate plausible human text, using Markov chains models and n-grams. The algorithm used was trained on books like Frankenstein, Sherlock Holmes accessed in txt files through datasets like the Gutenberg project ([project here](#)).

### International Collegiate Programming Contest

*Spring 2021*

- I represented my college on the annual International Collegiate Programming Contest in Spring 2021 with Team Grover.

### Web Developer (Volunteer)

*Summer 2020*

- Help my church in Senegal (home-country) to build a website for our youth group. I worked with a team of 3 web developers on the frontend and backend of profile pictures of pages. We designed and implemented functionalities using the Laravel PHP framework, Apache, MySQL, and HTML/CSS ([project here](#)).

## PROJECTS

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### Thanos Chat bot

*December 2020 - January 2021*

- Created a DISCORD chat bot (Thanos), with python and the DISCORD API, to execute tasks like monitoring the chat, sanctioning any abuse or harassment by censoring the user. Thanos can also query Wikipedia, send emails to people, and generate posters ([project here](#)).

### Wikipedia Java API

*Spring break 2021 - Present*

- Co-created the Wikipedia Java API with a friend which is an Open-source project, an attempt to provide a consistent API to allow Java users to query Wikipedia. Using JSOUP, we designed and implemented an Oriented Object structure (classes, methods and member variable) that was able to facilitate the access to information in the website ([project here](#)).

### 4 Nations Game

*Spring break 2021 - Present*

- Co-created the 4 Nations game which is a console-based Java RPG. My task in the team (team of 3) was first to design and implement the Oriented Object structure (classes, inheritance, methods, and member variable) of the storage system classes and the interactions between the memory (files) and the actions of the user in the game. In addition to that I designed and implemented the music class of the game ([project here](#)).

## ACTIVITIES

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### Engineer with a Mission (member)

*Spring 2021 - Present*

- The goal of this club is to help organization in the US and around the world by providing financial help and/or scientific support. This year we helped Takataka a Ugandan startup by working on improving their motors ([takataka](#)).