

Jonathan J. Allarassem

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EDUCATION

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

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

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.

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

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](#)).

Achilles

May 2021- June 2021

- Created a software that guess the language in which a text, a sentence or even a last name is written using n-grams. The software supports French, Germany, Spanish, and English. I trained the software on 20 books for every language to obtain the 4 models using the Gutenberg project dataset ([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 were able to facilitate the access to the website ([project here](#)).

ACTIVITIES

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](#)).