

Zachary Giacomarro

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CAREER OBJECTIVES

Seeking success in a position as a programmer/software engineer with experience in managing a variety of programming languages utilizing a strong coding background.

EDUCATION

William Paterson University – Wayne, NJ

2018 - 2022

Bachelor of Science in Computer Science

Relevant Courses: Discrete Structures, Data Structures, Networking & Info. Security, Computer Assembly Language, Software Engineering, Artificial Intelligence, Digital Logic, Operating Systems, Database Management, Computer Architecture, Computer Graphics, Programming Languages

TECHNICAL SKILLS

- Programming Languages – C/C++, C#, Python, Java, SQL
- Databases – MySQL, MS Access, MongoDB
- Software Engineering – Universal Modeling Language (UML), Object-Oriented Programming(OOP)
- Stack Development(server/client side) – HTML5, CSS3, JQuery, JavaScript, PHP, Git, Spring Framework, Spring Boot
- Platform: Windows, UNIX, Linux, RedHat Linux
- MS Office - Word/Excel/PowerPoint
- Monitoring – Prometheus with Grafana
- Messaging – Apache ActiveMQ, HiveMQ MQTT, Red Hat Fuse

PROFESSIONAL EXPERIENCE

UPS – Mahwah, NJ

Systems Programming Analyst

March 2023-present

- Maintenance of Java Spring Boot web application written deployed on Linux.
- Creation and management of MySQL database(s) and SQL stored procedures.
- Maintain monitoring of our infrastructure using Prometheus and Grafana.
- Complete server patching maintenance and SSL updates with ActiveMQ.
- Provide support to applications utilizing systems infrastructure.

UPS – Mahwah, NJ

ISM Developer/Engineering Co-Op

October 2022-March 2023

- Full Time IT position focusing in Information Services Management with the Web Applications and Messaging Systems team.
- Development and maintenance of a web application written in Java and HTML/CSS/JS/jQuery utilizing Spring Boot, Spring MVC and Spring JPA compiled with Maven; deployed on Linux.
- Creation and management of MySQL database and SQL stored procedures.
- Help maintain monitoring of our infrastructure using Prometheus and Grafana.
- Complete server patching maintenance with ActiveMQ.

Freelance Web Developer

February 2020-present

- Employed through direct or indirect contact with businesses and individuals.
- Development of websites through CMS and database.

PROJECTS

Apptio Dashboard

October 2022-present

- Project part of UPS ISM Co-Op.
- Web application written in Java utilizing Spring Boot, Spring MVC and Spring JPA; compiled with Maven; deployed on Linux.
- Used to view and manipulate data pulled from MySQL database tables as well as execute, view and export data using stored procedures from MySQL database.
- HTML/CSS/JS/jQuery used for Spring MVC Thymeleaf pages utilizing JPA data objects to pull data and manipulate data from MySQL database and execute stored procedures.
- Creation and management of MySQL database with multiple tables and SQL stored procedures.

DeglithGE(Deglith Game Engine)

May 2022-present

- 2D graphics game engine written in Java; compiled with Gradle.
- Utilizing LWJGL(OpenGL GLFW).
- Utilizing JBox2D Physics with custom Event System.
- Strongly inspired by the Jade game engine.
- GLSL shaders with texture batch rendering.
- zIndex functionality for Alpha Blending & more.
- Entity Component System (ECS), more specifically Entity Component Pattern, for sprite rendering.
- Rebuffer process function to enable GPU refresh for image redrawing.
- ImGui with docking, custom fonts, debugging draw options with debug lines and more for level editing.
- Gson serialization and deserialization for dynamically generated save data.
- Level Editor complete with drag 'n' drop with snap in place grid functionality, camera movement controls for scroll and zoom, custom object property menus, runtime play/stop controls and object translation gizmos for movement and scaling.
- & more(work in progress).

Discord Bot(s)

November 2021-April 2022

- Written in Python utilizing discord.py API.
- Implemented Google web API for connection to Google Forms/Sheets input/output.
- Implemented embedded media I/O between users and bots.
- Implemented two separate HTTP ping functions utilizing Flask in order to ping bot servers from web monitoring service with set intervals in order to keep bots from going offline.

Arithmetic Teacher

February 2018-March 2018

- Written in Java as an academic assignment project.
- Can be used as a basic arithmetic training device for addition, subtraction, multiplication and division.
- Utilizing Java Swing graphics in order to make a suitable GUI for usage.
- Users can select from two modes: addition & subtraction or multiplication & division.
- After mode selection, users can choose from one of three scaling difficulty levels.
- Score tracking inclusive to see how many users got correct or not.

Poker Simulator

February 2018

- Written in Java as an academic assignment project.
- Features a single game style interface with 5 cards dealt in which a user can select which cards they wish to keep in their hand with the others being replaced and score calculated from the remaining cards.
- Score calculated after each hand with wins being calculated with a linear scoring method with 1 to 9 points being added depending on the hand achieved for Single Pair through Royal Flush.
- Utilizing Java Swing graphics in order to make a suitable GUI for usage.
- Users can utilize a quit button to exit the program whenever they deem necessary.

Unit Converter

January 2018

- Written in Java as an academic assignment project.
- Used to convert a double-precision floating point value between a variety of different units of measurement.
- Units of measurement available for conversion include: kilometer, meter, centimeter, millimeter, micrometer, nanometer, mile, yard, foot, inch and nautical mile.
- Program utilizes a simple method of multiplying values by constant values necessary to result in a proper output for conversion.
- Utilizing Java Swing graphics in order to make a suitable GUI for usage.

WEB PROJECTS

Personal Business/Blog Website

August 2021-present

- CMS and database.
- Incorporated blog, contact page/form, about page, services page and home/landing page.
- <https://zachgiaco.com/>

WooCommerce Website

July 2021-present

- Employed through direct contact with the owner of business.
- CMS and database. Built with Oxygen builder and custom PHP code in files.
- Incorporated customized WooCommerce store, blog, contact page/form, about page, services page, home/landing page, review functionality, sliders, product search functionality, multiple payment options and more.
- <https://matthewjamesdesign.com/>

WooCommerce Website

September 2021-November 2021

- Employed through direct virtual contact with the owner of the business.
- *Partial* edits to already functioning CMS and database.
- Numerous additions of custom PHP code for specialized features for WooCommerce and others assets.
- <https://oudinstrument.com/>

PROFESSIONAL ORGANIZATIONS

Institute of Electrical and Electronics Engineers (IEEE)

May 2022-present

- IEEE Computer Society Member: May 2022-present
- IEEE Young Professionals Member: July 2022-present

William Paterson University Computer Science Society

November 2021-July 2022

- Collaborated with peers on modern technologies and latest discoveries.
- Encouraged others and assisted in helping with academic assignments.
- Networked with other society members for technological research.

NON-INDUSTRY WORK EXPERIENCE

ShopRite – West Milford, NJ

July 2018-October 2022

Food Service Clerk

- Maintain a clean, neat, organized, and safe work environment.
- Clean and sanitize all work surfaces, utensils and equipment.
- Greet all Customers and provide them with prompt and courteous service.
- Maintain acceptable shelf, case and display conditions by stocking, cleaning, straightening and rotating product.
- Prepare products, including salads, sandwiches, chicken, pizza, and pasta, entrees, catering orders, etc. according to recipe and established Company standards.
- Follow approved procedures for receiving and storing products to ensure quality protection and product rotation.
- Maintain signage on all items to alert customers to product choices and ingredients.
- Operate equipment as required by department, including slicer, scale, can opener, wrapping machine, rotisserie, fryolator, cheese grater/cutter, case cutter, and stove/oven.
- Regularly lift, pull, push and rotate equipment and merchandise that weights 25 lbs. and weights up to 60 lbs.
- Unload trucks and transport merchandise to the Food Service Department that weighs 25 lbs. and that weighs 60 lbs.

ADDITIONAL SKILLS

- Fluent in English.
- Can present to both technical and non-technical audiences with effective communication skills.
- Proven ability to learn and adapt to new and trending development tools.
- Can adapt to any work environment/atmosphere and is willing to work beyond expectations.
- Works efficiently as a team member for a multi-person project.