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| **EDUCATIONAL QUALIFICATIONS** | | | | |
| **Year** | **Qualification** | **Institution** | **Performance** |
| 2020 – 2024 | Btech. (Comp Sci) | Symbiosis Institute of technology | 6.51/10.0 **(UG)** |
| 2019 | Class 12th – CBSE Board | St. Paul’s School, Kota | 90% |
| 2017 | Class 10th – CBSE Board | St. Paul’s School, Kota | **86%** |

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| **WORK EXPERIENCE** |

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| **SKILLS/RELEVANT COURSES and Certifications** | | | | |
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| **Programming** | Java, python, C++, SQL | **Utilities and Tools** | VS Code, IntelliJ, Figma, MS Office | |
| **Frameworks** – GitHub, Spring boot, Spring | | | | |

**Pepcus Software Services Pvt. Ltd.** (*Software Engineer Intern*) (Sept’23 – Nov’23)

• Learned multithreading techniques to optimize system performance and responsiveness, which helped me understand how to manage concurrent processes and resource allocation.

• Gained experience with Hibernate for Object relation mapping, design patterns in streamlined database interactions.

• Accomplished the implementation of Create, Read, Update, and Delete (CRUD) operations.

• Implemented RESTful API’s using Spring framework and Java Persistence API, using postman to test the API’s.

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| **PUBLICATIONS** |

**Card Blitz: Memory retention | web dev ·** https://ieeexplore.ieee.org/document/10205763

* Developed a browser-based football player card matching game using HTML, CSS, and JavaScript.
* Incorporated animations and timer to create an entertaining yet stimulating game that trains visual memory skills.
* Targeted high school and college students as primary audience.
* Published paper demonstrating web development proficiency and knowledge of cognitive science principles in creating an interactive game aimed at boosting memory retention.

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| **KEY PROJECTS** |

**Pneumonia Diagnosis Convolutional Neural Network (CNN) Model | Python (3 months)**

* Engineered CNN features in TensorFlow and Keras to identify pneumonia from X-ray images with over 90% accuracy.
* Curated 3,000+ labeled X-ray image dataset, used data augmentation to expand.
* Designed GUI with PyCharm for doctors to visualize model predictions.
* Preprocessed images with OpenCV to optimize CNN performance.

**Financial Services Microservices Application | Java, Spring boot (December ’23 - ongoing)**

* Developed Account Management core microservice with REST APIs using Spring.
* Persisted data in H2 database, used Spring Data JPA for object-relational mapping.
* Incorporated Spring Actuator for operational insights and monitoring.
* Encapsulated input data with data transfer objects and created mapper class.

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| **POSITIONS OF RESPONSIBILITY**  **CAPTAIN FOOTBALL TEAM (2019)**   * .   **\** |

* After working with java in my pervious internship, I decided to pick up a project on Udemy to further develop my skills. This project on completion will have three core microservices of which I have currently developed, one for accounts and further working to complete the other two. With this project my aim is to delve into microservices, Service discovery management and trying to contain this microservice into a docker file.

∗ Developed one core microservice - Account Management.

∗ Implemented REST APIs for the microservice using Spring Web annotations for request handling and response mapping. Crafted Data Transfer Objects with Lombok to efficiently pass data between application layers.

∗ Persisted data in an in-memory H2 database and utilized Spring Data JPA for object-relational mapping.

∗ Incorporated Spring Actuator to expose operational insights and monitoring capabilities for the microservices.

∗ Encapsulated Input Data by introducing data transfer objects and created a mapper class that would map the Dto to respective entities.

This model was developed under a team of 4 students as a final year project under the guidance of our college professor. We aimed to achieve more than 90 % accuracy, after conducting a literature survey of more than 20 papers, we decided to use the following technologies to achieve our results.

∗ Engineered features and optimized CNN hyperparameters in TensorFlow and Kera’s to extract visual patterns from X-ray images to identify pneumonia with over 90 percent accuracy.

∗ Curated a dataset of over 3,000 labeled X-ray images and implemented data augmentation techniques using Kera’s ImageDataGenerator to expand the dataset.

∗ Designed a user-friendly GUI with PyCharm to allow doctors to visualize model inferences and predictions on patient X-rays. ∗ Performed image preprocessing and standardization techniques using OpenCV to enhance image data and optimize CNN performance.