



## Women in Cloud Center of Excellence in India

### Internship Topics - 2022

Sl. No.	Internship Topics
1	<p><b>Cloud computing for Rural Women Empowerment - Mahila Shakti Kendras (MSK)</b></p> <p>A project based on Cloud computing to facilitate activities of Mahila Shakti Kendras. This Project uses cloud computing concepts to develop an interface to interact with members of MSK. The platform provides information about using facilities of MSK. It considers various factors such as lack of devices and amenities in rural areas and provides efficient functionality to fulfill those gaps. It uses the latest variations of cloud computing technology for filling in the various technological gaps in village amenities.</p>
2	<p><b>Implementation of Cloud Health Platform to Manage the Cloud</b></p> <p>CloudHealth is the industry-leading cloud management platform that helps you easily visualize cloud spend, quickly view cost savings opportunities and automate cloud governance. Rackspace is the first CloudHealth partner to fully integrate with their platform to include everything from account setup to user management. For example, you can use single sign-on from the Rackspace portal into CloudHealth. Users have full access to CloudHealth with near real-time cost data, savings opportunities, inventory, and much more.</p>
3	<p><b>Integration of Sonarqube Pipeline Application in Cloud</b></p> <p>SonarQube, is a self-managed, automatic code review tool that systematically helps to deliver Clean Code. As a core element of Sonar solution, SonarQube integrates into the existing workflow and detects issues in the code to help any perform continuous code inspections of the projects.</p> <p>The Sonar solution performs checks at every stage of the development process:</p> <ul style="list-style-type: none"> <li>• SonarLint provides immediate feedback in your IDE to write code to find and fix issues before a commit.</li> <li>• Quality Gates keep code with issues from being released to production, a key tool to help to incorporate the Clean as You Code.</li> <li>• The Clean as You Code approach helps to focus on submitting new, Clean Code for production, knowing that the existing code will be improved over time.</li> </ul>
4	<p><b>Build a data factory application and integrate it with cloud</b></p> <p>Data Factory is a data pipeline orchestrator and ETL tool that is part of the cloud ecosystem. DF can pull data from the outside world (FTP, Amazon S3 and Oracle services), transform it, filter it, enhance it, and move it along to another destination. In the project it works for a health-data project communication. Data factory drive the data flow from raw ingestion to polished analysis that is ready to display.</p>



Sl. No.	Internship Topics
5	<b>Data Duplication Removal Technology</b> <p>The core aim of this application is to avoid the storage of redundant data. This application, when fed with new information, first cross-verifies with its existing database. If the data already exists, then it refuses to accept the new data. If the data does not exist previously, then the new information is stored in the database as a new set of data for further processing. This helps to greatly reduce the redundancy of data and helps in easy data retrieval and manipulation for all purposes.</p>
6	<b>Student information ChatBox</b> <p>This is a type of artificial algorithm that is extremely beneficial for the students as it analyses and then replies to any doubts or questions. The beginners get a golden chance to work on two technologies on this project. One for database management for storing the answers and the other for Cloud Computing.</p>
7	<b>Android Offloading</b> <p>Android Offloading would be a direct approach to facilitate easy offloading. Now you may ask what the offloading is? Offloading is a combination of Off + Loading which means switching off or reducing the load. That load may either be on an operating system like Android or Windows, depending upon the complexity of the environment. In this project, students will be proposing an offloading framework that uses cloud-based servers. Such servers will be reducing a load of Android by letting the users shift the heavy workload applications onto those virtual servers consisting of benefits of cloud storage.</p>
8	<b>ENC. Cloud Storage</b> <p>ENC. i.e. Encrypted Cloud Storage project is a thoroughly encrypted and adaptive model for analyzing variability in business atmospheres. All that data synchronized at cloud servers is stored in encrypted files consisting of cipher codes. Thinking how such cipher codes will be decrypted in a language easily understood by the employees and seniors? Here, the project uses a number system and its types which not only process but store the data files securely and with utmost encrypted-ness.</p>
9	<b>Blood Banking Via Cloud Computing</b> <p>Blood Banking is a process that utilizes well, the existing scientific methods, for facilitating the transfusion of blood. Depending upon the blood type and availability of donors in that particular area, this project can cater to such parameters well through a central database strengthened with the computing power of scalable and efficient cloud storage.</p>
10	<b>Rural Banking</b> <p>This project supports the service of rural banking for smaller rural communities constantly looking for robust and strengthened deposit mobilization mechanisms. The reason is obvious – the collection of cash or other funds during emergency situations. Thinking about how this will boost up the overall rural development! With this rural banking system, villagers may effectively engage themselves with online banking activities and understand the importance of online transactions promisingly using cloud servers</p>



Sl. No.	Internship Topics
11	<b>Text CAT</b> <p>Text CAT. (Categorization) is an ideal project choice for beginners especially students interested to learn the real-time implications of business analytics. Thinking about how this project is adaptive towards the welfare of a company! With NLP algorithms and flexible work practices of Business Analytics, the company's data may be classified and categorized as organized sets for better decision-making. Those sets provide conceptual views of the company's content/ information thereby ensuring efficiency and scalability in the business processes.</p>
12	<b>Host a Dynamic Website</b> <p>When a web page is dynamic, users can engage in interactive user interactions. You will greatly aid the aims of businesses by using a dynamic website. In this project, you will host a dynamic website on Amazon Web Services (AWS), and you will use client and server-side languages such as CSS, PHP, HTML, ASP, and JavaScript in the website building process to accomplish this.</p>
13	<b>Cloud computing in retail trading</b> <p>Retail traders are slowly venturing into this form of digital technology to execute their trading strategies based on the convenience of the cloud. Due to the convenience of the cloud, traders can use the cloud service to create new trading strategies, backtest on historical data and run time series analysis along with executing trades. This concept runs in trading related software – Software as a Service (SaaS) that a trader can use and run on demand. Analytics, research and testing of trading strategies are reasons why retail trading is migrating to the cloud.</p>
14	<b>Attendance System</b> <p>The attendance system records an employee's or student's attendance and keeps the information in the cloud. When it scans the card, it enters information such as the in-time, the ID number, and the out-time. This will assist an administrator in removing or adding users and tracking the number of hours an employee or student has spent on the premises.</p>
15	<b>Cloud based Medical Emergency Ambulance Booking System</b> <p>Design and implement a prototype using cloud technologies to offer cost-effective services to patients during emergencies. It is intended to reduce long queues in hospitals and long waiting periods for an ambulance via location-based services. By using this application, people who lives in the rural areas can be made easier and loss of lives can be prevented by providing timely response from the appropriate healthcare providers during emergencies.</p>



Sl. No.	Internship Topics
16	<p><b>Product trademark infringement tracking system using AZURE cloud services.</b></p> <p>Product trademark infringement occurs when an existing logo, phrase, or other identifying feature on a product or packaging “is likely to cause consumer confusion as to the source of those goods. Proposed Cloud based dashboard application will assist with the features like avoiding usage by an unauthorized person, detecting identical or deceptively similar, classifying Registered trademark, assuring Class of goods or services with high quality.</p>
17	<p><b>Advanced Driver Assistance Systems (ADAS) with services</b></p> <ol style="list-style-type: none"><li>1. Pedestrian detection/avoidance</li><li>2. Lane departure warning/correction</li><li>3. Traffic sign recognition</li><li>4. Automatic emergency braking</li><li>5. Blind spot detection</li></ol> <p>Using cloud computing technology.</p> <p>ADAS will equip vehicles, which can sense the environment around them, process this information quickly and accurately in a cloud system, and provide the correct output to the driver. Equipped vehicles have an array of advanced sensors that augment the eyes, ears, and decision-making of the human driver.</p>
18	<p><b>Data Analysis for reducing population migration from Indian Villages</b></p> <p>Work involves identifying Village population and resources in the village to make village self-sustainable by providing opportunities for people equipped in their own skill. Work also involves collecting data about people skills from each house in the village and storing the information in cloud for visualizing the skill set available and mapping them to opportunities available at nearby places within the village vicinity. This in turn reduces population migration in villages.</p>
19	<p><b>Model for placing industries to reduce pollution in urban Eco-system</b></p> <p>Industries in urban have the problem of getting raw materials on time and also have the tag in polluting environment in urban eco-system. Collecting data about Industrial requirement for production and suitable place for getting the raw material at cheaper rate will help the industry and in turn reduce the density of industries in urban areas. This can also help to reduce pollution in urban areas as well as reducing population density.</p>



<b>Sl. No.</b>	<b>Internship Topics</b>
<b>20</b>	<b>Software rejuvenation in cloud platforms using virtual machine live migration method</b> <p>There are various layers in a cloud platform i.e., virtualized environment. They are hardware, virtual machine monitor (VMM), virtual machine (VM) and applications running on virtual machine. VMM and VM suffer from software aging problem as they accumulate errors in the long run. By using VM live migration technique, it is possible to address this issue.</p>
<b>21</b>	<b>Software fault prediction in cloud platform using machine learning algorithms</b> <p>One of the reasons for the occurrence of software faults is problems in the environment in which it executes. The software hosted on the cloud platform which is usually virtualized environment is impacted by the execution environment. It is possible to predict software faults by analyzing the metrics collected from the virtualized environment. The power of machine learning algorithms can be used for the prediction of software faults. It helps to address the issues proactively and mitigate the downtime.</p>
<b>22</b>	<b>University Campus Online Automation</b> <p>This one is an interesting cloud computing project for engineering students. The goal is to automate university campus operations to streamline student enrolments and registrations, attendance management, class scheduling, and grading functionalities. All the major universities across the globe have cloud-based systems implemented for managing the campus activities.</p> <p>The users of this system will be the students, admin, and faculty. You can replicate one or multiple campus activities of your college or university. For example, you can focus on the talent management and placement cell, including student registration, posting vacancies, application for an open vacancy, and status updates. You can also combine multiple university campus activities, such as training and placement, student enrolments, attendance management, and class schedule.</p>

**For Further Details, Please Contact**

**Dr. Mamatha G S**

**Professor and Associate Dean – PG Studies**

**Department of Information Science and Engineering**

**RV College of Engineering ®**

**Email id: mamathags@rvce.edu.in**

**Mob: 9886311120**