

**Annai College of Arts & Science**

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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Aircraft Delay Analysis and Technique**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

### MASTER OF COMPUTER SCIENCE

Is a bonafide record of the original work done by

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April - 2018

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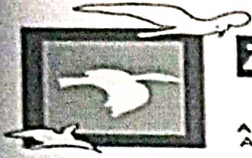
Internal Examiner

External Examiner

# Aircraft Delay Analysis and Technique

## Abstract

Flight delays hurt airlines, airports, and passengers. Their prediction is crucial during the decision-making process for all players of commercial aviation. Moreover, the development of accurate prediction models for flight delays became cumbersome due to the complexity of air transportation system, the number of methods for prediction, and the deluge of flight data. In this context, this paper presents a thorough literature review of approaches used to build flight delay prediction models from the Data Science perspective. We propose a taxonomy and summarize the initiatives used to address the flight delay prediction problem, according to scope, data, and computational methods, giving particular attention to an increased usage of machine learning methods. Besides, we also present a timeline of significant works that depicts relationships between flight delay prediction problems and research trends to address them



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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Automated ATM Fund Tracking and Analyzer**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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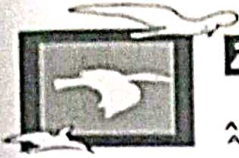
Internal Examiner

External Examiner

## **Automated ATM Fund Tracking and Analyzer**

### **Abstract**

The Automated Teller Machine ATM Banking System is a banking application developed to perform different banking services through the Automated Teller Machines. The all functions include the regular transactions like cash deposits, cash withdrawals, balance enquiry, balance statements, savings account, and current account; change PIN Number, Credit card Withdrawals and so on. The application design maintains the information of the accounts of various customers including the information of the ATM cards, their types Credit cards, Debit Cards and the transactions done by the customers through the ATM machine centers with correlation of the Banking Services. The stored details also include the information of the various centers in and around the ATM services, which help in the relational maintenance of every transaction in the ATM Machine by the customers with their concerned branch operations. The developed application is considered to the version upon the system, which is proposed to be built with the content and touch of the oracle as the centralize database with oracle 9i as the database. The overall banking ATM system is planned to be is the format of distributed architecture as the database platform. The proposals are planed to keep entire architecture to be browser (IE, Mozilla, Chrome) specific.



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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Automated Bio-Secure Attendance System**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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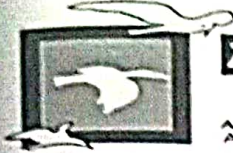
Internal Examiner

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## Automated Bio-Secure Attendance System

### Abstract

In recent time, there has been high level of impersonation experienced on a daily basis in both private and public sectors, the ghost worker syndrome which has become a menace across all tiers of government, employers concerns over the levels of employee absence in their workforce and the difficulty in managing student attendance during lecture periods. Fingerprints are a form of biometric identification which is unique and does not change in one's entire lifetime. This paper presents the attendance management system using fingerprint technology in a university environment. It consists of two processes namely; enrolment and authentication. During enrolment, the fingerprint of the user is captured and its unique features extracted and stored in a database along with the users identity as a template for the subject. The unique features called minutiae points were extracted using the Crossing Number (CN) method which extracts the ridge endings and bifurcations from the skeleton image by examining the local neighborhoods of each ridge pixel using a 3 x 3 window. During authentication, the fingerprint of the user is captured again and the extracted features compared with the template in the database to determine a match before attendance is made. The fingerprint-based attendance management system was implemented with Microsoft's C# on the .NET framework and Microsoft's Structured Query Language (SQL) Server 2005 as the backend. The experimental result shows that the developed system is highly efficient in the verification of users fingerprint with an accuracy level of 97.4%. The average execution time for the developed system was 4.29 seconds as against 18.48 seconds for the existing system. Moreover, the result shows a well secured and reliable system capable of preventing impersonation.



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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Automated Query Resolver for College Placement**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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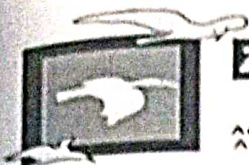
External Examiner

# Automated Query Resolver for College Placement

## Abstract

Campus Placement Automation (CPA) aims at providing the Training & Placement Office (TPO) of an Institute to automate the process of the office. This automation out-turns collecting required student data necessary for registration in Campus Placement process and notifying eligible candidates about the important dates and other updates. This Automation is accomplished through the medium of a Website and smart phone application. The front end of this system is built with Bootstrap. Bootstrap is the most popular HTML, CSS and JS framework which scales the website and application with a single code base, from phones to tablets to desktops with CSS media queries. The back end of this system is built with PHP. Fast, flexible and pragmatic, PHP is a server scripting language that empowers some of the most popular websites. MySQL is the most popular database system used with PHP for storing information categorically. Campus Placements are organized in nearly all colleges by companies from various sectors for recruiting eligible applicants. Organization of placement drives stand in need of particular information of the applicants. This process is exercised manually which is chaotic for both students and the TPO. This project is to facilitate students in college to register and apply for jobs. The students can access this system easily. In the main page there are options for a new register, a registered student to directly login using username and password, submit resume. In the registration form, the student need to submit required details related educational qualifications, professional skills and upload resume. Communication between the TPO and students is made smooth through dynamic notification by administration (admin) staff and a 'Q&A' forum for students. Statistics of the previously placed students is provided to the students to acknowledge them about the companies approaching for campus placement. Computers and information technology has a major influence on the society and the last few years have witnessed a tremendous increase in the capabilities and use of technology. Going on is an era of simplifying almost all complicated works using technology. Automation of Training & Placement Office will replace the manual processing of office which makes the mechanism slow and results into problems such as inconsistency and ambiguity on operations. The proposed system intends userfriendly operations which may resolve ambiguity and achieve certainty.





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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Automated Course Selection And Registration Tactics**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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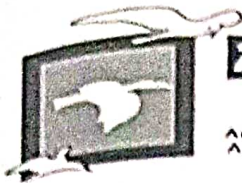
Internal Examiner

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## Automated Course Selection And Registration Tactics

### Abstract

This project, Automated Students' Results Management Information System (SRMIS) was carried out to automate the manual processes of compiling Students Examination Results. It was necessitated because of some setbacks in manual result processing. The system was designed to automatically take raw scores from excel files and store them in a database. It used past processed results to help the next course registration prior to results upload. Its result processing features includes the computation of grade point average (GPA), generation of result reporting sheets and transcripts. Every session, it keeps track of student's status information as recorded in the student files, specifying if a student is legitimate. The database also holds the lists of admitted students each year and records their school fees payment status. The software engineering was done with the Incremental model using an object-oriented programming approach. Raw data input to the SRMIS is one of the most cumbersome tasks. A computerized input using file upload saves lecturers a lot of effort and time of data entry. This system uses the student's course registration data to match the uploaded results. The essence is to design an efficient computerized system that will replace manual result processing which is prone to lot of paper work and errors. This reduces the tedious tasks involved, and enhances students' performance through timely publication of results.



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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Bioinformatics Tactics For Protein Improvement**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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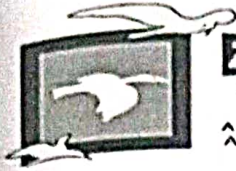
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## Bioinformatics Tactics For Protein Improvement

### Abstract

Most automatic functional annotation methods assign Gene Ontology (GO) terms to proteins based on annotations of highly similar proteins. We advocate that proteins that are less similar are still informative. Also, despite their simplicity and structure, GO terms seem to be hard for computers to learn, in particular the Biological Process ontology, which has the most terms (>29 000). We propose to use Label-Space Dimensionality Reduction (LSDR) techniques to exploit the redundancy of GO terms and transform them into a more compact latent representation that is easier to predict.



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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**BSNL Office Automation Technique**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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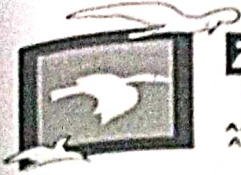
Internal Examiner

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## BSNL Office Automation Technique

### Abstract

Automation plays very important role in our lives. It makes the work easier and simpler so for simplified and easy living, Smart office automation system is designed in this system. This system is based on subsystems like lighting, heating. Security and alarming systems are also present. The sensors are used to extract the real time data from environment. Sensors are connected to the ARM 11 Controller. It processes the data and gives the output. Fan, bulb, buzzer are output devices connected to the controller which will work when the system crosses the threshold value. The sensor's data is continuously recorded. Fingerprint Identification module is used for security purpose. Fire alarm and emergency call is given to the service room. This data is stored in PC. This data can be viewed on other PC's through Network switch. The data can be seen on the webpage and on GUI. Nowadays most of the people spend lot of time in offices. Office environment should be leisurely so that the employees can give their best as office environment directly affects the working efficiency of employees/workers. So comfort is must and it is needed in office. In earlier decades technology at its best meant a fax machine and an electronic typewriter; today it's an iPad connected to the cloud solution. A smart office is a place that makes life easy for employees and customers, which empowers it and increases their ability to stay connected. This is achieved by making use of various advanced technology and different tools and solutions to improve the efficiency of users. As the physical boundaries are being bridged, a competitive and complex world focuses on innovation and creativity is being developed. The world is greatly experiencing the emergence of intelligent growth zones so smart office- has fast become the need of the hour.



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## PG Department of Computer Science

### Bonafide Certificate

This is to certify that the Project entitled  
**Bus Ticket Reservation and Cancelation Technique**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

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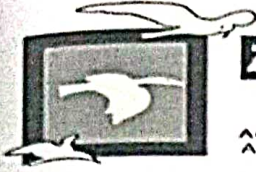
External Examiner

## Bus Ticket Reservation and Cancellation Technique

### Abstract

Online Bus Ticket Reservation System is a Web based application that works within a centralized network. This project presents a review on the software program "Online Bus Ticket Reservation System" as should be used in a bus transportation system, a facility which is used to reserve seats, cancellation of reservation and different types of route enquiries used on securing quick reservations. OBTRS is built for managing and computerizing the traditional database, ticket booking and tracking bus and travel made. It maintains all customer details, bus details, reservation details. In order to achieve the design, Imo Transport Company (ITC) was chosen as a case study because of its strategic importance to Imo State. Structured Systems Analysis and Design Methodology (SSADM) was adopted. In addition, PHP Hypertext Preprocessor (PHP) language was used for the front-end of the software while the back end was designed using MySQL. The software achieved is capable of improving the customer hand and relationship management in ITC operations. It is recommended that despite the present functionality of the designed software, an additional functionality such as the use of E-mail to send tickets and notifications to the customer and an online payment using credit cards/debit cards should be implemented into the system. Furthermore, other operations carried by ITC such as the courier services should also be integrated in order to enhance the system.





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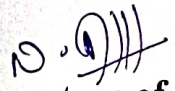
This is to certify that the Project entitled  
**Bus-Pass Registration and Renewal Mechanism**  
Submitted in partial fulfillment of requirements for the award of the degree  
of

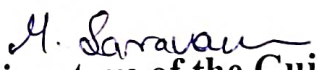
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## **Bus-Pass Registration and Renewal Mechanism**

### **Abstract**

The system will perform functionalities like retrieving information for the verification and allow commuters to get their passes without engaging them in long queue. Once the commuter gets verified the system allows him/her to book bus passes for any course online. The verification of the customers is done online using their Email id. No need to go for the bus stops to verify the details. Admin will send the notice to the passengers if their validity of bus pass is going to end soon. The current passengers will be notified and they can renew their passes by logging in using their id and password. And admin can view the chart of how many bus passes are generated in a month. The E bus pass registration application will aid aspirants to minimize their valuable time and renew the bus pass without standing in line or hours together in the counter. Primarily users should register the entitlement by acquiescing their facts over internet. Now admin will hold the authority to cross-check the applicant details and if he is satisfied he will move the bus pass and process it for further activities. The applicant can login using their username and password for the accomplishment of renewal. The extension process is passed by repaying the cash using the debit/ credit card. The applicant can also share their valued comments for further upliftment of the application.