

Dr. Mayurkumar Pravinsinh Raj

Assistant Professor (Computer Science), College of Agricultural Information Technology, AAU, Anand.

➤ Career Synopsis

- More than 23 years of experience in Academics and Analysis, Design, Development, Testing & Implementation for the client-server & Web-Based applications.
- More than 5 years of extensive experience in Analysis, Design, Development, and Implementation of Web-Based applications using ASP.NET and MS SQL Server.
- Two months on site (Singapore) project for support (for Order Management Module), requirement gathering & developing Prototype (for Demand and Supply Planning Module).
- Two months on site (Germany) project for development of an automated document generator application (requirement gathering, leading team).
- Developing Web-based & Client-Server application using Visual Basic 6/.Net with Oracle, MS SQL Server and Ms Access 2000/97.
- Strong analytical and programming abilities in PL/SQL.
- Strong domain knowledge of business function viz. Demand & Supply Planning, ERP, Order Management, Calibration, Preventive Maintenance and Payroll.

➤ Technical Skill

IDE	Visual Studio 2019
Web Tools	ASP.NET, JavaScript, AJAX
DBMS	MS SQL Server
Web Servers	IIS
Languages	C#, VB.NET, C, C++
OS	Windows
Packages	MS – OFFICE

⇒ Acquaintance

IDE	VS Code
DBMS	Oracle, MS Access, PostgreSQL
Analysis Tool	SAS
Report Tool	Crystal Reports 9.0, Microsoft Reports
Languages	VB, Core Java, python, WPF
OS	Linux, windows
Packages	MS Projects, Open Office

➤ Education

- **Ph. D. (Comp. Sc.)** (2018 Rai University)
 - **Title:** A Study of Application of Image processing in Agriculture & Development of an Algorithm for Classification of Wheat Cultivars in Gujarat
- **Gujarat SET Eligibility Exam** (September 2013)
- **MCA** (First Class 61 % 2003 IGNOU)
- **B. Sc. (Comp. Sc.)** (First Class 64.23 % 1997 SPU)

⇒ Certificate Course

Advance Diploma in Computer Application	(58.92% 2002 IGNOU)
Post Graduate Diploma in Computer Application	(59.83% 2001 IGNOU)
Certificate in Computing	(70.3% 1999 IGNOU)

⇒ Training (Online / Offline)

1. FDP cum Refresher on "Application of Geographical Information Systems" – 06-19, July 21.
2. "Neural Networks and Deep Learning" - Coursera – July 27, 2020
3. "Programming for Everybody (Getting Started with Python)", University of Michigan – 07-28-2020.
4. DeepLearning.AI - TensorFlow Developer – Specialization of 4 courses, Coursera – July 13, 2020
5. "Basic Principles of Remote Sensing Technology", IIRS – Dehradun – 13-25, April 2020.
6. MOOC on "Teaching Excellence" – NAARM, ICAR, Hyderabad 1-30, November 2019.
7. 5-week online FDP (2-week equivalent- 80 hours of active engagement) on "Courseware creation using Moodle" 08 July 2019-05 September 2019.

8. ISRO sponsored NNRMS Course on "GIS Technology and Advances" conducted by IIRS, Dehradun held during 01st May – 23rd June 2017.
9. "Basics of remote Sensing, GIS & GNSS" Duration - August 04 - November 14, 2014" organized by Government of India Department of Space, Indian Space Research Organization, Indian Institute of Remote Sensing, Dehradun.
10. Refresher course in Computer Science, ASC, Ahmedabad, 25-15, July 2012.
11. Orientation Program, ASC, VV Nagar, 2011
12. Introduction to Commodity Marketing – Feb 2011.
13. Overview of SAS – Dec 2010.
14. IT Based Decision Support System for Geospatial Knowledge Management for Sustainable Rural Livelihoods Security as National Academy of Agricultural Research Management, Hyderabad from January 19-29, 2009.

➤ Experience Summary

25th Sep 2008 – Cont.

Assistant Professor, Training & Placement Coordinator, AAO, Technical Officer for Dean, SSIP Coordinator
College of Agricultural Information Technology,
Anand Agriculture University, Anand, Gujarat, India – 388 110

April 2007 – Sep 2008.	Project Leader I-Link Infosoft Consultants Pvt. Ltd., Ahmedabad
Nov 2006 – Mar 2007.	Team Leader I-Link Infotech Pvt. Ltd., Ahmedabad
Oct 2005 – Oct 2006.	Software Engineer Aurionpro Solutions Ltd., Bombay (An ISO 9001 Certified Company)
Jun 2005 – Oct 2005	Programmer Semaphore Infotech Pvt. Ltd., Ahmedabad
Jun 2004 – May 2005	Jr. Software Executive Kevin Technologies Pvt. Ltd., Ahmedabad (An ISO 9001 Certified Company)
Feb 2002 – May 2004	Group Skill Assistant Industrial Training Institute, Ahmedabad
Dec 2000 - Oct 2001	Sr. Faculty NetVision, Ahmedabad
Apr 2000 – Dec 2000	Sr. Faculty ACT, Ahmedabad
May 1998 – Mar 2000	Sr. Faculty LCC, Ahmedabad
Jul 1997 – May 1998	Faculty ZED Point, Anand

➤ Awards

Best Teacher Award, 2016

➤ Projects

1.	Project Name: Student Corner
Client	AAU Students
Team Size	Jan
Duration	(8/2007) – (11/2007).
Environment	ASP.NET (VB.NET), SQL Sever 2008

Description : A web-based applications which provides secured policy to allows teachers to upload assignments and study material of their respective course of different semesters and discipline. Students can easily access all assignments and study material for current semester as well as all course for which they have make-up or supplementary exam i.e., courses for which s/he has got ATKT (Allowed to keep term).

2. Project Name: Option catalog search & Admin

Client BOMAG

Team Size Apr

Duration (8/2007) – (11/2007).

Environment ASP.NET (VB.NET), SQL Server 2005, ComponentArt Treeview control

Description : A couple of web-based applications

Admin site captures data for smallest part of a machine from various product families. Search site assists employees of BOMAG to search parts (options) based on various criteria such as machine type, machine no., order no., Product family and many more criteria above this it also supports free text search

Responsibility: Client interaction & gathering requirements and leading team of 3 members for development and releasing it on client's server.

3. Project Name: QRM & QRP (Open ticket System)

Client BOMAG

Team Size Mar

Duration (8/2007) – (10/2007).

Environment ASP.NET (VB.NET), SQL Sever 2005

Description : This is a web application which provides a functionality of open ticket system to employees of BOMAG and customers who have purchased machines or parts from BOMAG with mail support.

Responsibility: Client interaction & gathering requirements and leading team of 2 members for development and releasing it on client's server.

4. Project Name: Visitor Greeting System

Client CompuMaster

Team Size Mar

Duration (11/2007) – (12/2007).

Environment ASP.Net, VB.Net, Action Script, SQL server

Description : A web application - accepts visitor's information who is going to visit a company or firm in future or who is already at door steps and displays a greeting message.

Responsibility: Client interaction & gathering requirements and leading team of 2 members for development and releasing it on client's server.

5. Project Name: File Monitoring Tool

Client CompuMaster

Team Size Feb

Duration (1/2006) – (7/2007).

Environment VB.Net, CSDiff (File comparing tool from ComponentArt – Freeware)

Description : This is a window-based tool and it monitors a set of comma separated files or a pattern of files (for e.g. *.config) in a list of comma separated directories and shots a mail when any part of file is change or added or deleted.

Responsibility: Client interaction & gathering requirements and leading team of 1 member for development and releasing it on client's server.

6. Project Name: Web Translator Tool

Client BOMAG

Team Size Feb

Duration (11/2006) – (7/2007).

Environment MS SQL Server 2000, ASP.NET (VB)

Description : A Web tool takes support of various web translators such as goggle translator, dict.leo.org, freetranslation.com, babelfish.com (Altavista) and translates text. It also translates text based on data stored in database.

Responsibility: Client interaction & gathering requirements and leading team of 1 member for development and releasing it on client's server.

7. Project Name: BOMAG Mobile Application

Client BOMAG

Team Size Feb

Duration (6/2006) – (8/2007).

Environment Java MIDlet pages, csv files

Description : Mobile application which displays details of various products of BOMAG and their details.

Responsibility: Client interaction & gathering requirements.

8. Project Name: Pre-Layerer

Client BOMAG

Team Size Mar

Duration (11/2006) – (7/2007).

Environment MS SQL Server 2000, ASP.NET (VB), VB.Net

Description : This is a web application (Intranet) for BOMAG to dynamically (partially) generate Brochure's design and to capture its relevant content. This web application allows users to design their brochure & publish data in XML format, which is used by timer-based desktop application to generate actual Brochure in rich text format.

Responsibility: Client interaction & gathering requirements, creating new design and leading team of 2 members for development and releasing it on client's server.

9. Project Name: Zeiterfassung (Timesheet)

Client Thomas-Gruppe

Team Size Feb

Duration (12/2006) – (1/2007).

Environment MS SQL Server 2000, ASP.NET (VB)

Description : This is web-based Timesheet Register for entering Time-In and Time-Out details by/for employees/workers based on which plant he is assigned task.

Responsibility : Client interaction & gathering requirements, creating design and leading team of 2 members for development and releasing it on client's server.

10. Project Name: Cyberlog Global Logistics and Transportation

Client BDP, IDS

Team Size 75

Duration (10/2005) – Cont.

Environment MS SQL Server 2000, ASP.NET (VB), Crystal Reports

Description : Browser based solutions for BDP and its agents to update shipment status and record different type of Orders, generate various shipments and its tracking and much more (provided by Cyberlog).

Cyberlog is one of the leading technology solutions providers to the logistics industry; Cyberlog offers a wide range of products and solutions to Asia Pacific markets. Based out of Singapore Cyber log specializes in end-to-end logistics solutions.

(BDP Asia pacific is a well-known freight forwarder agent in logistic business. This system provides Comprehensive shipment control mechanism for orders booked; Browser based solutions for BDP agents to update shipment status, administrative control over the whole shipment process, tracking of all kinds of cost and maintaining accounts for BDP.)

Order Management deals with recording various kinds of orders such as (Customer Order, Purchase Order, Shipment Order), assist in container load planning, shows visibility for its fulfillment according to milestone set, it also logs order's history. Integrating it with existing Air Freight, Sea Freight & Warehouse module

Demand & Supply Planning module is client specific module, which helps planner to plan and monitor for various site at a time. Using this planner can capture demand for multiple sites, planning sheet reflects demand and confirmed COs within selected duration of warehouses for which planning is carried out and for fulfilling warehouse it shows quantity capable to fulfill and available to fulfill - within that interval, it also shows Demand forecast visibility, stock and value visibility as on date at product, client, office and warehouse levels.

Responsibility: Responsible for requirement gathering of Demand & Supply Planning module and led team of 5 members for development of Demand & Supply Planning module. Played a role of active team member for development of Order Management module. Integrating both this modules with various modules & support of Order Management module

11. Project Name: Labour and Employment Department (Gujarat Govt.)

Client Gujarat Government (Legal Department)

Team Size 20 Person

Duration (06/2005) – (10/2005)

Environment MS SQL Server 2000, ASP.NET (VB), Crystal Reports

Description : A Web based application for Labour and Employment Department of Gujarat Government. Basically, Concerned with Employee Registration and Factory Registration and Cancellation and reissuing of License.

Responsibility: Played and active role in development of Factory module and its Report. Develop a tool for generating forms (dynamically) used to create filter criteria for reports.

12. Project Name: KevERP

Client N.K Engineering Pvt. Ltd.

Team Size 15 Person

Duration (01/2005) – (05/2005)

Environment Oracle 10g, VB.Net, ASP.NET (VB), Crystal Reports, Acrobat Reader.

Description : An ERP solution is provided catering to the client's need for better control and management through out the Engineering Process. It integrates the functions of the sales & Marketing, Design, Planning & Control, Production, Human Resource & Payroll, Purchase & Stores, and administration & security.

Responsibility : Responsible for developing Sales & Marketing (**web based**), Purchase & Store Module (window based).

13. Project Name: Calibration Organizer

Client Aventis Pharma Ltd.

Team Size 3 Person

Duration (07/2004) – (12/2004)

Environment Oracle 9i, ASP.NET (VB), Crystal Reports, Acrobat Reader.

Description : This system is a **Web Application** for Aventis Pharma Ltd. (Verna, Goa), installed on Web server (IIS) in Mumbai. System allows every liable member associated with the Goa site to access information to which s/he is legally authorized.

It assists user to maintain

(a) Schedule for Preventive Maintenance (PM) of Machines using proper checkpoints.

(According to schedule)

(b) History Card for each and every machine.

(c) Informs about due date for calibrating Instruments.

Also, automatic mails are routed to higher level users informing about activity carried out by lower-level user. System shows pending jobs of current user. Audit trail is also maintained in the system.

Responsibility : Responsible for developing Preventive Maintenance, History Card & Audit Trail module. Creating Setup and installing it at client site.

14. Project Name: kevERP

Client Kevin Process Technologies Pvt. Ltd.

Team Size 3 Person

Duration (07/2004) – (05/2005)

Environment Oracle 8i, VB, Crystal Reports

Description : A Client-Server based Engineering ERP System – integrated and modular in design, giving online information on all the resources from engineering to production-planning-purchase and inventory. Any change in Demand and Supply equation of any component is instantly reflected in the change of its requirement.

Responsibility : Responsible for developing design, planning, purchase & store modules.

15. Project Name: Co-operative Society

Client For Employees of I.T.I (**Saraspur**)

Team Size 1 Person

Duration (04/2003) – (01/2004)

Environment Asp.NET (VB), MS-ACCESS, Crystal Reports.

Description : This system is accounting software, which assists in maintaining details of member's account, it also generates advance salary deduction statement for the employees of I.T.I and prints various reports.

Responsibility : Responsible for designing database, development, testing and implementing.

Personal Development

16. Project Name: Super Stock Manager

Client For dealer's of Balsara Home Product's

Team Size 1 Person

Duration (01/2002) – (05/2002)

Environment VB, Access, Crystal Reports

Description : This system is small inventory software, which assist in maintaining stock, billing and various reports, it also assists dealer in handling products of more than one company at a time. It helps in perfect management of salesman's activity.

Responsibility : Responsible for designing database, development, testing & implementing.

17. Project Name: Weighing Software

Client For New-Sharok Mill (Mafatlal Group), Nadiad

Team Size Indelco Pvt. Ltd and I

Duration (07/2003) – (10/2003)

Environment C++, FoxPro

Description : This system is a LAN based, it accepts data from three weighing scales, which are connected with each other by RS-485 interface, and all three are connected to computer on COM port by RS-232 interface. System is capable to check which load cell is active and responding. Also, it assists in maintaining a part of inventory and prints various reports.

Responsibility : Responsible for designing database, interfacing with COM Port (accessing data from COM port), development, testing and implementing.

➤ **Research Publications – [Google Scholar Profile](#)**

Prediction for rice yield using data mining approach in Ranga Reddy district of Telangana, India 2021

B Akula, RS Sparmar, M P Raj, KI Reddy - Journal of Agrometeorology 23 (2), 242-248

ROLE OF ICT'S BEFORE AND AFTER AGRICULTURAL DEVELOPMENTPROGRAMMES 2019

M P Raj, NM Vegad, JV Suthar - Gujarat Journal of Extension Education 30 (1), 48-49

Atmospheric Correction of Multiple Reflectance using S3 D Prajapati, M Raj, M Lunagariya - International Journal on Recent and Innovation Trends in Computing and Communication Volume 7 (6) Pages 65-68	2019
AGRICULTURAL EXTENSION AND MOBILE APPS M P Raj, JV Suthar, NM Vegad - Guj. J. Ext. Edu. Vol. 30 (2)	2019
Geographical Information Assisted e-Commerce (GIAE) for Leveraging Sustainability for Farmers' A Chawda, M Raj - Information and Communication Technology for Intelligent Systems (ICTIS 2017) - Volume 1. ICTIS 2017. Smart Innovation, Systems and Technologies, vol 83. Springer, Cham. https://doi.org/10.1007/978-3-319-63673-3_67	2019
Opinion of the farmers towards bio NPK consortium NM Vegad, M P Raj, BA Amin - Guj. J. Ext. Edu 29 (1), 40-43	2018
BIG DATA: SMART AGRICULTURE M P Raj, NM Vegad, BA Amin - Guj. J. Ext. Edu. Vol. 29 (2)	2018
STRENGTHENING AGRICULTURAL EXTENSION WITH REMOTE SENSING AND GEOGRAPHICAL INFORMATION SYSTEM INFORMATION M P Raj, NM Vegad - Guj. J. Ext. Edu. Vol. 28 (1)	2017
Compartmentalization of New Released and Old Wheat Cultivars (<i>Triticum Durum</i> & <i>Triticum Aestivum</i>) of Gujarat Region of India by Employing Computer Vision M P Raj, PR Swaminarayan, J Saini - Smart Trends in Information Technology and Computer Communications. SmartCom 2016. Communications in Computer and Information Science, vol 628. Springer, Singapore. https://doi.org/10.1007/978-981-10-3433-6_1	2016
Applications of pattern recognition algorithms in agriculture: a review M P Raj, PR Swaminarayan, JR Saini - International Journal of Advanced Networking and Applications 6 (5), 2495	2015
Applications of image processing for grading agriculture products MP Raj, PR Swaminarayan - International Journal on Recent and Innovation Trends in Computing and Communication Volume 3 Issue 3 Pages 1194-1201	2015
Study of Detached (Fresh) Leaf and Dried Leaf with Image Processing DK Parmar, BK Dabhi, KP Patel, M P Raj - International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169 Volume: 3 Issue: 1 57 - 61	2014
Web Based Customized E-Learning Management System for Students' Academic Evolution M P Raj, DR Kathiriya, RS Parmar - Guj. J. Ext. Edu. Vol. 25 (1)	2014
Critical Evaluation of Gujarat State Agricultural Universities Web Portals RS Parmar, DR Kathiriya, M P Raj - Guj. J. Ext. Edu. Vol. 25 (2)	2014
Multilingual Android based application for Meteorological Units Conversions and Calculation of empirical relationship M P Raj, JP Davara, RS Parmar, HV Raval - International Journal on Recent and Innovation Trends in Computing and Communication Vol 3 (1) pg. 76-81	2014

➤ **National seminar and conference attended: 8**

➤ **Membership**

1. Life member of the **Society of Extension Education**
2. Life member of **NAARM ALUMIN ASSOCIATION**
3. Life member of **THE INDIAN SOCIETY FOR TECHNICAL EDUCATION**
4. Life member of **THE INDIAN SCIENCE CONGRESS ASSOCIATION**
5. Life member of **INDIAN SOCIETY OF REMOTE SENSING**