

David Kumar Swamy Rapaka

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E-mail: rdavidkumar1729@gmail.com**Profession (Present)**

- ✓ **Principal**, Government College, Rajahmundry (an autonomous Institution with CPE Status) since 24th August, 2016

Various Positions held**Administrative:**

- ✓ Academic Guidance Officer,
O/o Commissioner of Collegiate Education, AP, Hyderabad
:OCT 2012–AUG 2016
- ✓ Principal, Govt. Degree College, Jangaon, Warangal Dist.
:OCT 2010 – OCT 2012
- ✓ Chief Information Officer (CIO), O/o CCE, AP :2006 - 2010
- ✓ Academic Officer, Academic Cell, O/o CCE, AP :2003 – 2006
- ✓ Joint Director of Collegiate Education (I/C) :AUG – OCT 2012
- ✓ Special Officer (Acad. & IT) (On Duty), O/o CCE :APRIL–AUG 2012
- ✓ Joint Director of Collegiate Education (I/C) :19-28APRIL 2012

Academic:

- ✓ Reader/Associate Professor : 1997 - 2003
- ✓ Lecturer/Asst. Professor : 1987 - 1997

Administrative Experience

Department Level (Nov 2003 – Oct 2010 & Oct 2012 - Aug 2016)

- **Academic Guidance Officer, O/o CCE, AP., Hyderabad**
- Joint Director of Collegiate Education (I/C), O/o CCE, Hyderabad
- Deputy Director, O/o CCE, Hyderabad
- Special Officer (Academic & IT), O/o CCE, Hyderabad
- **Chief Information Officer, Collegiate Education Department, AP**
- Academic Officer, Academic Cell, O/o Commissioner of Collegiate Education, AP
- Chief Coordinator, Library Automation in Govt. Colleges in the State through Information and Library Network (INFLIBNET) Center, Ahmedabad.
- **Chief Coordinator, Jawahar Knowledge Centers, Collegiate Education, AP**

Institutional Level (Oct 2010 – Oct 2012)

- Principal, Govt. Degree College, Jangaon, Warangal District, AP
- Principal (FAC), Govt. Degree College, Cheriyal, Warangal District, AP

College Level (1987-2003)-Various positions held

- Head, Department of Mathematics & Computer Science
- Academic Coordinator
- Coordinator, UGC Cell
- Secretary, College Planning and Development Council
- Coordinator, Restructured Courses
- Coordinator, Examinations

CIO Work Experience (2006 - 2010)

Chief Information Officer (APCIO 2006 Batch) in the **Collegiate Education Department**, Government of Andhra Pradesh, Hyderabad and handled the following duties and responsibilities:

- Assists the department in **Planning & Implementation of Information Systems for eGovernance.**
- Provide advice and assistance to senior managers on IT acquisition and management.
- Develop, maintain, and facilitate implementation of sound and integrated IT architecture
- Promote effective and efficient design and operation of all major Information Resources Management (IRM) processes for the agency, including improvements to work processes.
- Assess requirements for personnel regarding knowledge and skills needed to achieve performance goals
- Assess the extent to which all managers at the agency meet those requirements.
- Develop strategies and specific plans for hiring and training.
- Submit reports to the HoD on progress made in improving IRM capability.
- **In addition, this position has primary duties, as part of the strategic planning process, Establishment of Infrastructure & Security, Capacity building and Training & Placement activity through Jawahar Knowledge Centers (JKC)**

Achievements: 2006-16

- Played a crucial & pivotal role in the establishment of **Jawahar Knowledge Centers** in the Department of Collegiate Education.
- Trained 1.5 Lakh students in **Jawahar Knowledge Centers (JKCs)** established in Degree Colleges across the state in “**Employable Skills**”(Communication Skills, Soft Skills, Analytical Skills and Computer Skills, Accounting executive skills (Tally software))
- **More than 15,000** UG Students were placed in different National & Multi-National Companies through campus recruitments in JKCs
- IT initiatives at the department level: Department Portal: www.che.ap.gov.in and JKC Portal, HRMS package

- IT infrastructure established in 100 Govt. Colleges in the state during 2006-08 (JKC IT Labs & ELLs).
- Published two research papers in Mathematics (at advanced Level) in well-established journals of international standard.

Academic Distinctions/ Awards / Memberships Received

- *Panel Member of Mathematical Reviews Editorial Committee of “American Mathematical Society”* since Nov 2005.
- *Andhra Pradesh Regional Coordinator for Mathematics Olympiad of National Board for Higher Mathematics, Department of Atomic Energy, Govt. of India, from 2005-2011.*
- Awarded “**UGC Teacher Fellowship**” during 1994-95, by the University Grants Commission, Govt. of India, for one year.
- Selected for “**Lectureship in Mathematics**” through **Andhra Pradesh Public Service Commission** in 1987 and joined as Lecturer in Mathematics on September 29, 1987.
- Selected for the Award of **UGC – Junior Research Fellowship (“National Education Testing”** at *Master’s Level*) by the University Grants Commission, Govt. of India, for five years (1986-1991).

APCIO’s Training (Sponsored by the IT&C Dept., GoAP) Attended:

Title : “**Planning and Implementation of Information Systems for Electronic Governance**”
(*A Management Development Program*)

Institute : **Indian Institute of Management, Ahmedabad**

Duration : Three months (March - May 2006)

Project title : **Accredited Colleges Management & Information System**

Education

Degrees

- Ph. D., (Mathematics), University of Hyderabad, 1997
- M. Phil.,(Mathematics), University of Hyderabad, 1986
- M. Sc., (Mathematics), University of Hyderabad, 1984
- B.Sc., (Mathematics Main), Andhra University, 1982

Diploma(s)

- PGDCS (Computer Science) University of Hyderabad, 1998

Ph. D.

Ph. D Awarded : May 1997

Title : **Second and Higher Order Structures on Manifolds**

Supervisor : Prof K. Viswanath
: Department of Mathematics & Statistics
: School of Mathematics & Computer/Information Sciences, University of Hyderabad, India

M. Phil.

M.Phil Awarded : Jan 1986
 Title : **Second order Differential Equations on Manifolds**
 Supervisor : Prof K. Viswanath
 : Department of Mathematics & Statistics
 : School of Mathematics & Computer / Information Sciences, University of Hyderabad, India

Areas of Expertise

Area of specialization: Global Analysis (Manifolds and its Applications)

Areas of interest

- Analysis of Algorithms and Data Structures
- Discrete Mathematical Structures
- Theory of Computation
- Digital Image Processing
- e-Learning
- Neural Networks
- Data Standards
- e - Governance
- Capacity Building
- Project Management

Teaching interests

MATHEMATICS

- Analysis, Abstract Algebra, Linear Algebra, Differential Geometry, Global Analysis on Manifolds, Complex Analysis, Topology & Functional Analysis and Quantitative Techniques.

COMPUTER SCIENCE

- Discrete Mathematical Structures with applications to Computer Science, Programming Concepts – An Algorithmic Approach, Theory of Computation, Digital Image Processing, Graph Theory and DBMS.

Knowledge in the areas of...

- IT & Project Management
- E- Procurement
- E-Governance
- Management & Administration
- Capacity Building

Initiatives taken up (*as a Principal*) at Govt. College Rajahmundry (24 Aug 2016 to Dec 2016)

- Decentralization of college administration
- Reconstruction of College Website (dynamic)
- Establishment of one Digital Class Room (Science Block)

- Conducted National Seminars by
 - Food processing dept (UGC sponsored)
 - Digital Science Lab Workshop by Science depts. (CPE sponsored)
 - MOOCs workshop by DRC (CPE Sponsored)
 - “Language Skills – Employability” by Language depts. (Sponsored by CPE)
- Swatch Bharath programmes (Cashless transactions programmes/ Domalapai Danda Yatra Rallies/ Vanam Manam etc.)
- Adoption of 5 villages through NSS Units
- Botanical Garden in Science Block and Land scaping in Arts & Science Blocks
- RO Plant in Science Block/Seminar Hall with all facilities
- Establishment of “Center for Innovation, Incubation and Entrepreneurship (CIIE)”
- Establishment of “Center for Gandhinian Studies”

Initiatives taken up (*as a Principal*) at GDC, Jangaon (17 Oct 2010 to 16 Oct 2012) (Two years)

- Streamlined the academic curricular activities
- Initiated JKC training programs and Students were encouraged to attend JKC Campus drives.
- Education tour programs to all three faculty students, i.e., B.A., B.Sc., & B.Com,
- Remedial Coaching to slow learners through UGC schemes
- Strengthening of Library as Learning Resource Center
- Strengthening of infrastructure/Lab equipment in all science departments
- Establishment of SEMINAR HALL with latest public address system, LCD with screen and other infrastructure for the benefit of the students to utilize for academic and other expert seminars
- Establishment of three Computer Laboratories with Latest Computer hardware infrastructure (Server – Thin Client Technology) for the benefit of B.Sc, B.Com and M.Com students
- Networking of all three Computer Laboratories including the entire institution (all departments, Principal Chamber, Seminar Hall and Office)
- 2 MBPS Leased Line Connectivity with Internet facility for the entire institution for the benefit of the students
- Introduction of two new job oriented/restructured courses, i.e., B.Com (Marketing) and B.A(HRM) from the academic year 2011-12.
- Computerization/Automation of College Management System
- College website., www.abvgdcjangaon.org.in
- Construction of New building block with FIVE Class rooms and the construction work is in progress (from State Govt. Grant)

- Construction of one New Class room and renovation of Ladies Waiting Room and the work is in process (UGC Grant)
- Strengthening of College Planning and Development Council
- Initiated several NSS, Cultural & NCC activities
- Organized a State level Seminar on “**PRINCIPAL LEADERSHIP**” (sponsored by the University Grants commission) on 17 Feb 2012 at Jangaon.
- **Initiated the Process of assessment of the college (after 5 years) for NAAC re-accreditation to be done during July’2012 and the academic, curricular, co-curricular & Extra Curricular and Extension activities are in progress.**
- Strengthening infrastructure through UGC Special assistance Grant
- Strengthening of Lab equipment’s utilizing State Govt. Budget
- Strengthening of Lab equipment’s utilizing UGC grants

IT Projects initiated at Department Level: 2005 - 2010

- **Department Website/JKC Portal**
Developed the department’s portal URL ID www.che.ap.gov.in and www.apcce.gov.in and developed in Dot Net platform. This portal provides online registration process for students of JKC’s, online attendance for mentors, online honorarium statement, JKC Language Lab Monitoring System and access to Students’ portal which provides the course material, presentations and other e-lessons including career guidance.
- **Human Resource Management System**
A HRMS package for Commissionerate of Collegiate Education provides the database of staff (Teaching & Non-Teaching) and administration of Govt. and Aided Colleges in the state. This application is web based & has been developed in Visual Studio Dot Net platform & MS-SQL Server database.
- **Colleges and Courses database**
Deals with College Information, Infrastructure, work Load, Courses and Action Plan. This application is web based & developed in .NET & SQL Server and is ready for implementation.
- **Automation of Libraries**
106 College Libraries of Govt. Degree Colleges in the state were automated using SOUL software procured from the UGC-INFLIBNET
- **Learning Management System (eLearning portal)**
A web based application and e-content to be hosted on the server. All students will be provided access to use the content. The e-content has been developed by subject’s experts from the department.
- **JKC IT Laboratories**
JKC IT Laboratories were established in 25 Govt. Degree Colleges in the state to provide training to students in Computer Skills and

Employable Skills relevant to the needs of the industry. The JKC IT Labs are equipped with latest IT infrastructure (Two DELL Servers connected to 50 Thin Clients under LAN with Internet Connection). The Labs run on Microsoft platform and Linux. JKC IT Labs are designed to promote student centered and learner friendly environment.

- ***JKC Language Laboratories***

JKC Language Laboratories (Software based) were established in 75 Govt. Degree Colleges across the state to provide training to students in Communication Skills (Oral & Aural), Soft Skills along with training through software based Aptitude Lab and Career Lab. The JKC Language Labs are equipped with One DELL server and 30 clients connected under LAN with Internet Connection. The Labs run on Microsoft platform and English Language Lab software platform along with 300 hours of English Lab content.

Professional Contributions

Research Publications

- “**Local Expressions of Hessian Structures and Dissections on Manifolds**” (with K Viswanath), Journal of Ramanujan Mathematical Society 2(2), 1987
- “**Riemannian Sprays**” (accepted in the 60th Annual Conference of Indian Mathematical Society, held at Poona University from 27th December, 1994 to 30th December, 1994
- “**Higher order Hessian Structures on Manifolds**”, Proc. Indian Acad. Sci. (Math. Sci) Vol.115, No.3, August 2005, pp.259-277. eJournal: <http://www.ias.ac.in/mathsci/index.html>,
- “**Second order structures on Banach Manifolds**” (with K. Viswanath), J. Indian Inst. Sci., Mar – Apr. 2006, 86, 125-136. eJournal: http://journal.library.iisc.ernet.in/vol200602/paper4/Davidkumar_R.PDF

Research Articles Reviewed

(As a panel member of Mathematical Reviews Editorial Committee of **American Mathematical Society**)

- Kocarev,L.; Makraduli,J; Amato,P, “ **Public-Key Encryption based on Chebyshev Polynomials**” , MR Number: 2187035, Primary classification: 94A60, Secondary classification(s): 33C90.
- Xiao, Liang-liang; Liu, Mu-lan, “**Linear secret sharing schemes and rearrangements of access structures**”, MR Number: 2173644, Primary classification: 94A60, Secondary classification(s): 94C10.
- Nivas, Ram; Verma, Geeta, “**HSU- Structure in the cotangent bundle**”, MR Number: 2189830, Primary classification: 53B05.

Conferences Attended

- “**52nd Annual Conference of India Mathematical Society**” held at University of Rajasthan, Jaipur from 27 - 30 December, 1986.
- “**Second Annual Conference of Ramanujan Mathematical Society**” at Madras Institute of Technology, Madras from 5 - 7 June 1987 and presented a Research Paper.
- “**Orientation Programme for Degree College Teachers**” from 2 - 29 May, 1988 conducted by UGC-Academic Staff College, Osmania University, Hyderabad.
- “**Orientation Programme for Degree College Teachers**” from 3 October, 1989 to 2 November, 1989 conducted by UGC-Academic Staff College, University of Hyderabad.
- “**National Symposium on “Dynamical Systems and Ergodic Theory**” from 6-8 December, 1997 organized by University of Hyderabad and Indian Statistical Institute at University of Hyderabad, Hyderabad.
- Seminar on “**New Directions in Applied Mathematics**” at Kakatiya Institute of Technology and Science, Warangal on 8 March, 1998 and presented a Research Paper.
- “**Refresher Course in Mathematics**” sponsored by UGC Academic Staff College, University of Hyderabad, Hyderabad from 13 September, 2000 to 3 October, 2000.
- “**Refresher Course in Computer Science**” sponsored by UGC Academic Staff College, Jawaharlal Nehru University, New Delhi from 13th August, 2001 to 7th September, 2001.
- “**Refresher Course in Computer Science**” (thrust area: Image Processing), sponsored by UGC-Academic Staff College, University of Hyderabad, Hyderabad from 27 August, 2003 to 20 September, 2003.
- National Seminar on “**UGC-Info Net E-Journals Consortium Access to Scholarly Journals and Databases**” organized in collaboration with different Universities in India by INFLIBNET (Information and Library Network) Center, Ahmedabad from 29-30, November 2004 at Bangalore University, Bangalore.
- “International Congress of Mathematicians 2010” (ICM 2010) held at HICC, Hyderabad from 19 – 27, August, 2010.
- Training programme for Principals of Degree Colleges in “Administrative and Financial Matters” from 1-5 February 2011, organized by the Academic Staff College, Moulana Azad Urdu Central University, Hyderabad
- **International Conference on Community Colleges “Mainstreaming Skills Education: Creating relevant Human Resource, 6th & 7th February, 2013 at New Delhi**

Visits Abroad

- Attended the Conference on “Technology deployment trends” organized & sponsored by the Wipro Leading Edge 2008 at **Gold Coast, Brisbane, Australia from 22 – 25 November 2008.**

Seminars/Trainings Organized

- A UGC-State Seminar on “**Functioning of Degree Colleges : How to Improve – VISION 2020**” Sponsored by University Grants Commission, at Government Degree College, Jammikunta on 9th March, 2000 as **Chief Organizer**.
- Training program to Librarians of 50 Govt. Colleges in AP on “**SOUL Operation & Installation**” is organized in collaboration with the CCE, Hyderabad, AP & UGC – INFLIBNET, Ahmedabad from 2-7 June 2005.
- Training program to Librarians of 50 Govt. Colleges in AP on “**SOUL Operation & Installation**” is organized in collaboration with the CCE, Hyderabad, AP & UGC – INFLIBNET, Ahmedabad from 4-8 Dec 2006.
- TTT program to 200 Lecturers on “Language Enhancement” and “Analytical Skills” organized in collaboration with INFOSYS in Sept 2007 for two weeks under Infosys Project Genesis project.(I Batch)
- TTT program to 200 Lecturers on “Language Enhancement” and “Analytical Skills” organized in collaboration with INFOSYS in April 2007 for two weeks under Infosys Project Genesis project.(II Batch)
- Training program to 250 English Lecturers of Govt. Colleges in AP on “ **Usage of English Language Lab Software**” is organized in Collaboration with M/s Globarena Technologies Pvt. Ltd from 3- 17 Mar 2008.
- Training program to 200 English Lecturers of Govt. & Aided Colleges on “**Collaboration with University of Cambridge, UK - ESOL Examinations**” from 24 June 2008 to 12 July 2008.
- TTT program to 100 Lecturers on “Language Enhancement” and “Analytical Skills” organized in collaboration with INFOSYS in Sept 2009 for two weeks under Infosys Project Genesis project.
- “Principals Conclave” for Principals of 30 Govt. Colleges organized in collaboration with INFOSYS in Sept 2009 under Infosys Project Genesis project.
- Domain training on “F&A” and “Smart Talk” programs organized to JKC Coordinators and ELF trainers in Sept 2009 under Infosys Project Genesis project in collaboration with INFOSYS.
- TTT program to 100 Lecturers on “Language Enhancement” and “Analytical Skills” organized in collaboration with INFOSYS in Sept 2010 for 10 days under Infosys Project Genesis project.
- Principal’s Training Programme(Fully Residential) on “Academic, Administrative and Financial Matters” from 15 – 20 October, 2012 at Dr. MCRHRD Institute, Hyderabad.
- English Language Training to lecturers (6 Days) at Dr MCRHRD Institute in Feb 2013.
- “Human Values & Professional Ethics” training to Lecturers & Principals at IIIT Campus, Hyderabad in three batches in May – July 2013 (Master trainers programme)

Organized **International Congress of Mathematicians** (ICM) 2010 -
Public Lectures

- Chairman, ICM 2010 Public Lecture's on 23 Aug & 25 Aug 2010 at Hyderabad (during ICM 2010 : 19-27, Aug 2010)
- Organized three Public Lecture's –
 - I Lecture for students at Senior School Level (X,XI,XII std)
 - II Lecture for students of Mathematics at College level (UG and PG std)
 - III Lecture for Teachers of Mathematics at College level (with the support from the Commissioner of Collegiate Education, AP)
- Speakers
 - Prof Bill Barton, Professor of Mathematics, University of Auckland, New Zealand and President of ICMI (I & III Lecture)
 - Prof Gunter M. Zeigler, Professor of Mathematics, Technical University, Berlin, Germany (II Lecture)
- Topics
 - Where is Mathematics Taking us? An exciting ride into it. (I Lecture)
 - Proof for the Book (II Lecture)
 - Why Mathematics teachers are like Sachin Tendulkar? (III Lecture)
- Venue(s)
 - Brahmakumaris-Shanti Sarovar, Global Peace Auditorium, Gachibowli, Hyderabad
 - Govt. City College(A), Nayapul, Hyderabad

Magazines Published

- **Chief Editor** for the Magazine "**Neuron**" published by the Students and Staff of the Department of Computer Science at Govt. Degree College, Jammikunta for the year 2002-2003. The release of an academic oriented Magazine was appreciated by many.

Participation in Academic Activities

- Member, Board of Studies in Mathematics for UG Courses, Kakatiya University, Warangal during 1995-1997 and 1999-2001.
- Chief Examiner & Examiner for paper valuation at Kakatiya University Examinations in Mathematics & Computer Science during 1996-2003.
- Question Paper Setter for both Mathematics & Computer Science for Kakatiya University UG Examinations.
- Chief Moderator, Paper Setting for Intermediate Public Examinations, A.P., for Mathematics during the year 1998-99.
- Expert Lectures delivered to PG students in both Mathematics & Computer Science at various PG colleges under the jurisdiction of Kakatiya University & Andhra University.

- Participated in KU Band Program as “Content Generator” in Mathematics Subject for UG Students
- Six Live telecast lessons in “Computer Science” [Subject area: Algorithms & Flow Charts] presented through MANA TV program of AP-SAPNET for Degree students during Aug – Dec, 2004 for UG Students.
- Presented Tele Lesson on “SEPERATION” (a Lesson from Topological Spaces) for M.Sc (Mathematics) Students in ‘Saptagiri’ National TV Channel in March’2005.
- Presented Tele Lesson on “Open Sets” (a Lesson from Real Analysis) for UG students in “Saptagiri” National TV Channel in September’2005.
- Five Live telecast lessons in “Computer Science” [subject Area: Data Structures] presented through MANA TV program of AP-SAPNET for Degree students during July 2005 – Jan 2006 for UG Students.
- Participated in the Live Tele Conference organized by the BR Ambedkar Open University on “Mean Value Theorems and its Applications” as a Subject Expert on 9 Oct 2005 at BRAOU, Hyderabad.
- Participated in many IT workshops organized by different IT companies in Hyderabad, Mumbai on technology updates during 2005 - 2010

Personal Information

Date of Birth : 01 January 1963
 Father’s Name : Bhushanam Rapaka
 Mother’s Name : Krupabai Rapaka
 Marital Status : Married
 Hobbies : Listening music, Reading books
 Blood group : O Positive

Office address:

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 Rajahmundry
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Dr. David Kumar Rapaka
 Dated: 12th December 2016