**DETAILED PARTICULARS.**

1. Full Name: **ASHISH KUMAR SHARMA.**
2. Date of Birth : (a) **08-07-1966**

 (b) **8th July, 1966**.

1. Gender : Male
2. Physically Handicapped : No
3. Community : General
4. Address(**Permanent**)For Correspondence : **House # M-1/406,Gulmohar Enclave,Rakesh Marg,Nehru Nagar-3,Ghaziabad-(UP)**
5. Citizenship : Indian
6. Father’s Name : **(Late) Lt.Col(R) Dinesh Kumar**(**Army Ordnance Corps**)
7. Educational Qualifications:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Exam Passed | Division | Year of Passing | Duration | Board/Univ | Subjects | Subject of Specialization |
| I.C.S.E |  IInd |  1981 |  | Delhi Council. | Maths,Eng,Hindi,Soc Sc,SUPW,Science | NA |
| Inter. |  IInd |  1983 |  | UP Board. | Eng,Maths,Hindi,Physics,Chemistry | NA |
|  B.Sc |  Ist |  1985 |  2 Years | Agra University | Physics,Maths,Statistics | NA |
|  M.Sc.  |  IIIrd |  1990 |  2 Years | Meerut University | Mathematics | Operations Research |
| Diploma in Computer Management(DCM) |  Ist |  1990 |  8 Months | Datapro | MS\_DOS,Lotus 123,COBOL,dBASEIII+ | NA |
| Certificate Course in C Language |  |  1995 |  6 Months. | APTECH Computer Education. | C Programming Language. |  |
| Course in C++ and Object Oriented Programming with emphasis on Internet and JAVA |  | 3.3.1997-14.3.1997 | 2 Weeks | ERDCI,Noida | C++,Internet and JAVA |  |

**NOTE : 1) Successfully** completed the training Programme on **“Application of GIS in the Management of Coastal Critical Habitats”(From 8/10/2001-13/10/2001)** Conducted By **Department of Ocean Development(GOI)** through **Integrated Coastal and Marine Area Management(ICMAM) Project Directorate,Chennai.**

 **2)** Successfully completed the course **“Programming In Visual C++” (From June,2002-July,2002) f**rom **Kanetkar’s Institute of Computing and Information Technology Pvt Ltd,Nagpur.**

 3) Successfully completed the course **“Programming in VB.NET”**

 from Aug,2009-Oct-2009 from **SEED InfoTech, Nagpur.**

10. Details Of Employment (in Chronological order)**:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Office/Instt/Firm | Post Held | Part time/Contract Basis/Ad-hoc/regular/Temp | Duration | Total Period | Pay Scale | Nature of Duties. |
| Lakhotia Computer Centre,New Delhi. | Faculty Member. | Permanent. | Aug-1991-Sept,1992 | 1 Year 1 Month | 1500/- | Training Students in various Computer Courses. |
| School Training Executive | School Training Executive |  Contract Basis.  | Sept-1992-31-Aug,1993. | 1 Year | 2800/- | Conducting training in Computers to Students of DPS,NOIDA. |
| ICS Computer Systems Pvt Ltd. | Computer Executive |  Regular | 2.11.1993-August-1994 | 9 Months | 3000/- | Conducting Computer Courses run by ICS. |
| Welham Boys School,Dehradun. | Teacher:Computer Sciences. | Probationary | 18.8.1994-31.5.1995 | 10 Months(2 Full Terms) | 2500/- + benefits | Teaching Computers to School Students. |
| Cambridge School,Noida. | Teacher:Computer Studies. | Leave Vacancy | 18.11.1995-31.3.1996 | 5 Months | 3000/-(Consolidated) | Teaching Computer Science to Class XII Students |
| Apeejay School,Noida | TGT (Computers) | Probationary | 1.7.1996 –31.3.1997 | 9 Months | 4400/- | Teaching Computer Science to Class XII Students |
| Innodata India Pvt Ltd,NOIDA | Data Processor | Probationary | 11.9.1997-June,1998 | 10 Months | 3200/- (Consolidated. | Processing Data for International Projects. |
| Goyal Brother’s Prakashan,New Delhi. | Consultant Asstt Editor & Proof Reader | Temporary. | 15th June,1998-16 December,1998. | 6 Months | 5000/- | Writing and Editing Text Books. |
| ISRO/DOS. | Scientist/Engr “SD” | Permanent | 5/4/1999- till Date |  | 8000/-13,500/-. | Processing of Remotely Sensed Data/GIS. |

From September, 2008 the salary scales have been revised (as per the 6th Pay Commission) for the post of Scientist/Engineers.

### Additional Information

1. Have acquired proficiency in **C Programming Language,** **VC++,** **Microsoft Visual Basic (6.0) Enterprise Edition**, **Avenue Programming Language (ArcView GIS 3.2a)**, **Seagate Crystal Reports**, **ArcGIS 9.0(including ArcMap, ArcCatalog and Arctoolbox)** and **MapObjects**. Also learned writing **GeoProcessing Scripts with ArcGIS**.Have acquired working familiarity with **PCI Geomatica, Erdas Imagine, Microsoft Office 2000**,**Unix** **Operating System,** **Windows XP**, **Windows 95/98/2000, Adobe Photoshop, Programming in ArcObjects using VBA**/ **Programming in Visual Basic 2005,Python Scripting and ENVI software**. Also, have acquired working proficiency in using **Python Programming Language. Also, engaged in learning Core-JAVA, Quantum GIS and ASP.NET programming.**
2. As part of the **CGIS Project Team**, have conceptualized,designed,written and tested various Dialog Based Interfaces/Stand alone scripts mainly in **Avenue** **Programming Language** and **Projects in Visual Basic(and sometimes EASI programs)** for query shells and other utilities facilitating user friendly database access and retrieval and other related routine tasks relevant to the project. The challenge was that of making voluminous data generated in the project easily and seamlessly accessible to the users concerned so that time and labor can be saved in the proper utilization of data. Also, tested a wide variety of data for its quality, accuracy and integrity before its eventual access. And, was involved in the data archiving (final deliverables) as part of this project and was responsible for the Vendor/Centre Interface of various aspects of data management regarding the project. Whatever the other demands made on the resources of the Computer Lab vis-à-vis this,(and other projects) have been successfully met. Also, as part of the CGIS Project Team, helped in integrating various datasets of 8 districts of Chhattisgarh in a SW named GYAN (Gramin Yojana Information System). For this purpose developed a few utilities in Avenue to expedite the work.
3. Successfully computerized the **Survey of India (SOI) Index Map** i.e. the layout depicting the scheme of the toposheets covering entire India is now accessible using the computer both spatially and non-spatially. Then, on this Index map (in spatial format), developed utilities for overlaying the Raw Satellite Data (disseminated in the form of CD’s) so that its exact geolocational details is available to the user i.e. the user comes to know exactly how many **1:1000000**,**1:250,000** , **1:50,000** and **1:25,000** sheets does the scene cover. The entire effort was carried out in **VB/MapObjects** as well as in **ArcView GIS 3.2a.** The SW can work in the following two ways
* One By One the Data CD’s are inserted in the Drive

And its Geolocational and other details are known immediately.

* Or, Firstly, a Database of Data CD’s is prepared and

then, the user can plot the details of any scene he/she desires at a later date and also find out how many sheets does the scene cover. Then, if the user so desired, the scene can be drawn also.

Conversely, he/she can find out how many scenes are covering a selected 1:250,000/1:50000 sheets.

Also, using the **Scenes** and the **Sheet Database**, Two dialogs have been designed which can tell what scenes or sheets cover an input bound. The user gives an input bound and the SW tells him/her both spatially and non-spatially where does the bound falls.

 A similar exercise has also been carried out for rectified satellite scenes/ETM scenes also. The Geographical data in case of rectified scenes has been taken from the text file prepared by running the **GEOREP** utility found in **PCI Geomatica**.

Note: The **SOI Index Map** is a Paper Document depicting the scheme of 1:1 Million, 1:250000 and 1:50,000 Toposheets published by the **SOI.**

1. Developed a Software for keeping track of the backups taken on various media like

CD-R/CD-RW/DVD/MOD/8 mm data cartridge/4 mm data cartridge. etc. This SW was developed in **Microsoft Access.**Since keeping track of the large data sets generated/prepared is quite a Herculean task manually, this SW is a boon in situations where a dataset’s status is to be known immediately. An additional SW, doing the same task but in a different and more compact way has been made recently by me. In this **SW**, developed in **VB**, Text Files containing the details of the **CD/DVD/MOD** etc are generated and then later on converted into **DBF** files for easy access and retrieval.

1. Often it is important to find out how many SOI sheets are covering a desired

State/District/Place. In this connection, I have made a SW which

* On an ALL India Level finds out the number of sheets

Covering a user chosen state. This has been achieved by overlaying the SOI Index Map Scheme on coverage of India showing District/State/Tahsil. Either the user can see visually all sheets covering the area of his/her interest or (spatial viewing) or non-spatially by using an easy to use dialog.

The user can also find out the area of any selected state as well as all states adjacent to it. Have developed the SW in VB/Map Objects as well as in Avenue.

1. Developed a Dialog based SW in Avenue which accesses various Data Sets(part of Village Resource Centres eg. Landuse/Landcover, Soil etc) and generates statistics for any selected village related to those data sets. E.g. areas of different types of land use falling in a village.
2. Developed a **Road Information System**. In this System, a very intuitive interface enables the user to access all villages of any District/Tahsil of Chattisgarh and then,for every Village/Taluka/Sheet(**1:50,000**) the roads in the Village/Taluka/Sheet are displayed. Thus, instead of seeing the entire Roads coverage as one entity, the user can focus on a village and see the roads of that village to the exclusion of everything else. Similarly a **SOIL INFORMATION SYSTEM** has also been developed.
3. Have developed an utility in **ArcView GIS 3.2a** as well in **VB/MapObjects** which enables us to find out in which **1:50,000/1:250,000** sheets any place in India falls and what are the scenes enclosing it. The places can be either chosen through a List Box and its coordinates known or it can be directly clicked on the map. This SW is a quick and an easy method of locating places or Area of Interest in India. This SW comes in handy when the user quickly wants to know where does a selected place( i.e. its Lat/Long) falls and and in which sheet does it fall. Besides the above ,the following information is instantly available, through an another utility:

 **Nearest Road**, **Distance from the nearest road,** **Nearest river**, **Distance from the**

 **Nearest river**, **1:50,000 sheet** in which the place falls, **Lat/Long** of the selected place,

 The **watershed** and the **Agro-region** in which the place falls and the various scenes

 covering the place.

1. Developed a utility, both in ArcView GIS 3.2a as well as in VB/MapObjects to Browse the Election Commission Data for each of the 16 Districts of Chattisgarh. Patwari Halka Wise the Villages can be accessed i.e the user selects a District, then a tahsil, then Patwari Halka and he gets to see all villages falling in that Patwari Halka both spatially and non-spatially.

1. Have developed an **Access Table Utility** which,through an user friendly interface enables us to copy either the structure or both structure and data of a user-selected table residing in a user-selected **MDB** file into another user-selected **MDB** file.
2. Have Developed a **Integrated Database Browser** In VB/Avenue enabling us to seamlessly browse three Types of Databases viz Tables in a **MDB** File, **DBF** Files and **Text Files.**
3. I have made a Menu-Driven,user friendly software which enables the user to browse/query the database of **Cartosat/Resourcesat** scenes. Both spatially as well as non-spatially, the user can get to know the **Geolocational** (i.e. Which State/district/Place does the scene cover) and other details of any scene.(with regard to physical features).This facility is just an extension of the work mentioned in Point #3 above. Using this facility enables us to create huge databases of satellite scenes effortlessly.
4. I have created important themes viz **National Highways** and **India Places**, **Subcatchment**, **Watersheds**,**India Watershed Places and Indian Agro Regions** etc deriving them from Maps published by **NATMO** on 1:1 Million scale which were mosaicked together and given Geographical Projection. Using the Watershed Coverage, India District Coverage and India Places coverage, have developed the following application
5. Through a user-friendly Dialog, the user is prompted to Choose Either a district or a place and then, he can query which subcatchments and/or Watersheds does the District/Place cover.
6. Another application, just the reverse of a) Enables the user to choose either a Subcatchment or a Watershed and then, he can query which Districts or Places does the chosen Subcatchment or Watershed cover.

A similar interface has been developed for viewing the details of the Indian Agro regions .

1. Also developed a Menu-Driven, user friendly interface which enables the user to **Browse/Query LISS IV** scenes covering only the state of **Chattisgarh.** The Database consists of 273 Scenes. For each scene, the user may obtain information about the

Districts and places of Chhattisgarh which it covers. This S/W has been extensively used for the Town and Country planning project carried out for the state of Chhattisgarh.

1. Have finished a Dialog based Interface which enables us to quickly browse the

Database of all Satellite Scenes procured by the Centre(e.g **LISS-I/LISS-II/LISS-III/PAN/WIF/OCM etc)** scenes and obtain the following information about any selected scene, in addition to viewing the footprint of the scene overlaid on the Map of India

* The PROJECT for which the scene was used.
* The State/District/Place/Road/River, which the scene covers.

 As an extension to the above facility, have also developed an interface where the scenes

 Database can be searched using State, District, Places, Dates and AOI. Have also developed

 a non-spatial version of this interface wherein a user may wish to browse/query information

 about satellite scenes without seeing its footprint displayed on the Map.

1. Also, developed a program to calculate the shortest distance (Geodesic) on the surface

of the earth. The user merely selects 2 places on the earth (in India as well as the world) and clicks a button and immediately the user gets to know the shortest distance between the places selected.

1. For the project of **Mapping Land Degradation** in **Chhattisgarh State**, have developed a

Utility in VB (using Map Objects for mapping purposes) which enables the user to see the LDD Points on the satellite Image and on clicking any point, the user can see all photographs taken of the point. This utility has also been created using Avenue in ArcGIS 3.2a and in VB using MapObjects.This SW is extremely useful in seeing the entire LDD Database of the state of Chhattisgarh in one place in an extremely user friendly manner. This SW has been extended to include all those projects requiring a Library to be maintained of GCP’s together with their photographs.

1. Have developed a SW which enables us to quickly find out the location and other details of

Any village of Chattisgarh State. To search for any village, the user need not remember the full name of the village. Just a few characters will enable him to narrow down the search. The following details of any selected village are displayed:

1. **Longitude**
2. **Latitude**
3. **Elevation(in mts)**
4. **Total Population**
5. **Area**
6. **Bhucode**
7. **Village Name in Hindi**
8. Successfully computerized the Books Library of the Centreusing ADO technology**.**
9. Successfully computerized the MAP inventory of the Centre**.**
10. Created a Digital Database of more than 500 rectified toposheets of MP and Maharashtra. The database consists of individual as well as a mosaic of the rectified sheets**.**
11. Using **SRTM** Data, developed an application which enables the user to
12. View the spatial distribution of places in India on the basis of user-specified elevation categories
13. Select a place and find out its elevation in Meters.

 Again, using the same SRTM data, developed an application to find out the Elevation

 Profiles of Major Roads and Rivers of the country. The Main Dialog of the SW has been

 written in VB/MapObjects while the necessary tables containing elevation data of the

 road/river have been prepared in ArcView GIS 3.2a using Avenue Programming Language.

1. Linearly Referenced some major Railway/Road Routes of India and thereafter developed an application in VB/MapObjects to find out the distance between any two stations on any route, along that route.
2. Using the proximity toolset of ArcMap,found out the nearest road and railway route to various places in India and then developed an application in VB/MapObjects to enable the user to easily see spatially the nearest road and rail route to the place he/she selects. Other useful extension to this application is being developed.
3. Developed a Menu-Driven Software in VB.Net to calculate reference crop evapotranspiration of various stations of Maharashtra on a daily and monthly basis.
4. Was Faculty for Remote Sensing, GIS and GNSS course conducted for NCERT Teachers.Conducted Theory as well as Lab Sessions in GIS and Image processing using QGIS and ILWIS software.
5. Till now, have officially participated in 6 **Science Expos**(An Interface of Science and Society) organized **at Raman Science Centre, Nagpur**.(years 2012,2013,2014,2015,2016 and 2017).
6. Supported Trainee Scientists of ARS in their **Professional Attachment Training** held at the centre from 13th May, 2015 to 12th Aug, 2015.
7. Presented papers in Hindi Technical Seminars and User Interaction meets of NRSC,Hyderabad and an article for the In-house Magazine “SAMVAD”.
8. As an official, attended the ISRS Annual Symposium held at Nagpur from 17 to 19 Sept,2009.
9. Developed various utilities in ArcObjects/Python/EASI-PACE for use in KOMPSAT Data Processing project.
10. Involved in acquisition of satellite data and processing(of Landsat Data) in Urban Sprawl study for 50 selected cities.
11. Automated the Sentinel Data Searching, Downloading and retrieving the metadata from the **Copernicus Open Access Hub** using Python and Sentinel API.

**NOTE:** The process of converting Programs written in Avenue to Arc Objects/Visual Studio 2005

 Is currently on.

 Besides all of the above, have downloaded various useful extensions of ArcView GIS

3.2a which were incorporated in the S/W to perform various tasks efficiently.

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**Contact Phone/Mobile Numbers**:

 **9371246931(Mobile): Contact Person: Mrs. Manisha Sharma.(Nagpur)**

**Dated : --19/08/2019 (ASHISH KUMAR SHARMA)**

 **Professional References**

1. **Mr. Anoop Patel, Consultant(Remote Sensing & Program Management),**

**MAP-IT,Bhopal(MP).—Mobile:7489112804. E-Mail-anoopgis.85@gmail.com**

1. **Mr.Prashant Kawishwar,Scientist,CCOST,Raipur.- Mobile:0930022101**

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