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Chemistry
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5 year Integrated M.Sc.
Male
DOB: 21/04/1988

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.00

PROFESSIONAL EXPERIENCE

PHILIPS ELECTRONICS INDIA LIMITED, GURGAON [Jun '11-Jul '11]

Root Cause Analysis of Demand Forecasting

- Assessed seasonal and trend variations to analyze effects of trade schemes on monthly sales data
- Studied sales records of previous 5 years and applied multiple **time-series forecasting** models on them to assess their effectiveness in predicting sales
- Equipped the planning team with **3 models** to validate and benchmark the accuracy of forecasted sales data; the models made **25% more accurate** predictions

Automatic validation of Kit-Mismatch

- Formulated a **VBA** code to locate incompletely allotted kits by SAP and find missing counterparts
- Saved 5 hours** of manual validation each day and **prevented delay** in further processing of data

SUNDERAM ELECTROTECH PVT. LIMITED, KOTA [May '09-Jun '09]

Market survey and Strategy designing

- Automated the creation of consolidated retailer-wise sales data files; enabled firm to track areas showing poor sales
- Conducted market survey in such areas to understand **retailer emotions** for brands & promotions and proposed 2 schemes based on the findings; achieved **12% increase** in sales

INTERNSHIP AND PROJECT

RUHR-UNIVERSITY BOCHUM, GERMANY, SUMMER INTERNSHIP [May '10-Jul '10]

Development of algorithm in Python to design porous materials for storage of hydrogen fuel

- Improved and extended **object oriented python code** to construct **3D models** of porous coordination polymers such as Metal Organic Frameworks (MOFs)
- Authenticated the code by computationally generating initial structures of a recently discovered MOF and found other possible isomers; opened new avenues of research in that direction
- Incorporated the results along with developed code in **manuscript**; to be **published** in peer research journal

RIESKE PROTEIN IN PHOTOSYNTHESIS, MASTER'S THESIS [Jul '11-Till date]

Computationally assessing the role of Rieske protein in Photosynthesis

- Investigating various properties of **electron transfer** reaction in Rieske protein to comprehend its importance
- Optimized the structure of the protein in various excitation states to find most stable form
- Currently performing **Monte-Carlo simulations** and **Molecular Mechanics** to calculate its reduction potential

POSITIONS OF RESPONSIBILITY

MAINTENANCE COUNCILOR, HOSTEL-5 [Aug '09-Apr '10]

Head of Maintenance Council; led a team of 5 secretaries and managed budget of INR 4 Lakhs

- Initiated and executed **first-ever** renovation of hostel grounds; introduced Frisbee and Badminton court
- Organized *Van Mahotsav* in the hostel for the first time; planted 40 saplings to promote greenery

PRODUCTION IN-CHARGE, PERFORMING ARTS FESTIVAL (PAF) [Feb '11-Mar '11]

Jointly led a team of 60 volunteers across 3 hostels in the biggest inter-hostel cultural competition

- Conceptualized the designs and supervised construction of sets for the competition with a budget of **INR 70,000**
- Promoted use of scrap and recycled materials in production, led to **10% saving** in production cost

AWARDS AND ACHIEVEMENTS

- Honored as **Gem of PAF** for leading team to win **Best Production Trophy** in PAF [2011]
- Awarded **PAF Color** for promising work in Production team [2010]
- Awarded **Hostel Organizational Color** and **Special Mention** [2010,09]