

# SURYA PRAKASH SHUKLA

Contact: +919971733203

Email: suryashukla944@gmail.com

NOTICE PERIOD: IMMEDIATE JOINER

## EDUCATION

**Indian Institute of Technology Delhi, India B.Tech in Textile Technology, End June 2020**

Relevant Coursework : Algorithms and Data Structure, Linear Algebra & Differential Equations, Engineering Mechanics, Intro to Computer Science, Calculus, Numerical Model Of the The Atmosphere and Ocean, Self-Organizing Dynamical Systems, Technical Textiles, Design of experiments and Statistical Technique

## WORK EXPERIENCE

**Software Engineer**

[Oct '20 – Feb '22]

*Kothari Infotech pvt ltd, Surat*

- Integrated X-Rite i1iO for i1Pro3 Device in PrintPRO Software for Automated Color measurement and Color Profiling.
- Works in PrintPRO Team to provide Maintenance Support for PrintPRO Software.
- Created Multi-Thread application, bouncing balls – using Windows thread creation and Synchronization APIs in the Training Program of Kitl.

**Worked on Epson SC F3000 and F2100 Printer Model Decoder**

- Write a Decoder for Epson SC F3000 and F2100 Printer Model that can convert Ripped Image File to Individual CMYK Color Image.

**Reproducing Color Images as Duotone**

- Rather than printing image with CMYK inks, we choose the sets of inks for the particular image being reproduced.
- Used Neugebauer halftone model, Luminance transformation, ink-spread transformation and normal transformation to get gamut mapping.
- Used Bezier-Curve mapping instead of linear mapping to accurately reproduce some colors while clamping others to the interval endpoint.
- Used simulated annealing algorithm to find the best suited inks for a given image in Duotone printing.

## ACADEMICS PROJECTS

**Data structures and algorithm | Self project**

Implemented linked list, tree, binary search tree, deque data structures and their operations in C++.

Implemented searching, sorting, and hashing based algorithms by leveraging containers in STL.

**SELF CLEANING TEXTILES BASED ON NANOTECHNOLOGY( Dr.S.Wazed Ali )**

- The self cleaning fabrics work using the photocatalytic properties of nanosized tin dioxide(SnO<sub>2</sub>).
- In these reactions the organic compounds (i.e. dirt, pollutants, and microorganisms) are broken down into CO<sub>2</sub> and H<sub>2</sub>O.
- We used 1:1 molar ratio of Zinc Acetate and K<sub>2</sub>SnO<sub>3</sub> and put in a magnetic stirrer and temperature was kept 40 degree C for 6-7 hrs to synthesis ZnSn(OH)<sub>6</sub>.
- Use X-ray photoelectron spectroscopy to measures the elemental composition at the parts per thousand range, empirical formula, chemical state and electronic state of the elements that exist within a material.
- Use TEM, SEM and XRD technique to collect nanometer- and atomic-resolution information about the surface topography and composition of the sample.

**ACCOUNTING AND FINANCIAL MANAGEMENT (Dr. Abhijit Majumdar)** - studying about income statement, balance sheet, cash flow statement, Financial ratios, cost concept and profit planning analyzing a real world business case study using financial tools and skills and proposed a possible solution for the same.

## TECHNICAL SKILLS

C/C++, Python, SQL, Mfc(Microsoft Foundation Class), Window Programming, C++ stl Library, Object oriented Programming, Data Structures and Algorithms, Problem Solving, Probability and Statistics, Linear Algebra, GIMP, Image Processing, Operating Systems

## SCHOLASTIC ACHIEVEMENTS

Secured All India Rank 3465 in JEE advanced among 150000.

Secured All India Rank 3063 in JEE Main among 1400000.

Secured 114 Rank in State Engineering exam (AKTU).

Awardee of National Means-cum-Merit Scholarship offered to meritorious students of class IX to XII.

## POSITIONS OF RESPONSIBILITY

- **GAIL UTKARSH SUPER 100 Mathematics faculty for IIT JEE**

- Guided and taught IIT JEE mathematics over 100 students during 2017 to pursue their dream of making into IITs - An exceedingly high selection rate of 100% in JEE main and 40% in JEE advanced - Executed own idea of term plan for crash course ,revision schedule and test syllabus for JEE 2017

- **Munirka Teaching Project**

- developed meritorious talent from the economically weaker sections of the society by guiding through classroom teaching, uplifting the community by educating the next generation. The ideology is to be a mentor, teacher and a friend for the kids and guide kids who lack good role models in their communities