FORAM MEGHAL JOSHI

Personal Information

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EDUCATION

B. Tech | Dhirubhai Ambani Institute of Information and Communication Technology

2010-PRESENT | Information and Communication Technology

CPI: 7.28/10

AISSCE (Class XII) | International Indian School, Al Jubail, Saudi Arabia

2010 | Aggregate Percentage: 93.8

AISSE (Class X) | International Indian School, Al Jubail, Saudi Arabia

2008 | Aggregate Percentage: 90.8

SKILLS

Computer Languages: Java, C, C++, HTML5 & CSS3, Javascript, MySQL, LTFX

Tools and IDEs: Eclipse, Intelli J Idea, PhpMyAdmin, PG Admin III, Maya, Adobe Photoshop,

Adobe Flash

Biotechnology Tools: Cadnano, Cain, Visual DSD, 3DNA, DNA Pen

ELECTIVES

Core CS: Software Engineering, Algorithms, Data Structures and Algorithms, Database

Management System, Operating Systems, Computer Networks, Introduction

to Graph Theory, Formal Specification and Verification

Applied CS: Computer Graphics, Introduction to Animation, Web programming

Biotechnology: Introduction to Biotechnology, Natural Computing, Coding Theory and Appli-

cations

PROJECTS

3DNA: A Tool for DNA Sculpting

Description: 3DNA is an interface aimed to ease the task of visualizing, modeling, and de-

signing complex 3Dimensional shapes ,utilizing the concept of single stranded DNA bricks. 3DNA is a combination of graphical user interface and an inte-

grated sequence generator for synthetic DNA sequences.

DNA Pen: A Tool for drawing on a Molecular Canvas

Description: DNA Pen provides a user-friendly interface to aid scientists to create 2D shapes

at the nano-scale. It allows the users to draw/write on the molecular canvas

and generates the DNA sequences, which self-assemble.

e-PATHSHALA: A semester project on Software engineering for developing an interface to

serve as online educational help for school children. I was the core-developer

for the user interface of the project.

PUBLICATIONS

Posters:

- $1.\ SK$ Gupta, F Joshi, D Limbachiya and Manish K. Gupta "3DNA: A Tool for DNA Sculpting" April 2014, published at FNANO14 proceedings, Duke University, USA
- 2. A Goyal, D Limbachiya, S K Gupta, F Joshi, S Pritmani, A Sahai and Manish K. Gupta "DNA Pen: A Tool for Drawing on Molecular Canvas" September 2013, published at DNA19 proceedings, Arizona State University, USA

CONFERENCES AND WORKSHOPS

Conferences:

- 1. 11th Annual Conference on Foundations of Nanoscience (FNANO14), April-2014, (Organized by Duke University at) Snowbird, Utah, USA
- $2. \;$ Frontiers in Chemistry & Biology of Oligosaccharides, January- $2014, \;$ IISER, Pune, India
- $3.\,\,19^{\rm th}$ International Conference on DNA Computing and Molecular Programming (DNA19), September-2013, Arizona State University, Tempe, AZ, USA

Workshops:

 $1.\,$ Workshop on Superresolution Fluorescence Imaging, FNANO14, January- 2014, (Organized by Duke University at) Snowbird, Utah, USA

RESEARCH INTERESTS

- 1. Natural Computing
- 2. Synthetic Biology
- 3. DNA Self-assembly
- 4. Chemical reaction networks
- 5. Data Structures and Algorithms
- 6. Coding Theory and Applications