

Ujjwal Pasupulety

☎ +91-9901066474 • ✉ ujjwalpasupulety@gmail.com • 🌐 [ujdcodr](http://ujdcodr.in)
in ujjwalpasupulety

Education

National Institute of Technology Karnataka

2nd Year B. Tech, Information Technology

CGPA:9.35/10(As of May 2017)

Surathkal, Mangalore

2015-2019

Delhi Public School South

High School, Percentage:96.8% [99% in Computer Science]

School Topper in Board Examinations

Bangalore

2013-2015

Delhi Public School South

Secondary School, CGPA:10/10

Bangalore

2007-2013

Technical Skills

- **Languages** - C/C++, Java, Python, HTML/CSS, BASH Script, Chuck
- **Tools** - \LaTeX , Git, ProjectPencil, IBM Bluemix, Blender, OpenShot

Relevant Coursework

Data Structures and Algorithms, Digital Design, Computer Architecture, Unix Programming, Real Analysis, Integral and Differential Calculus, Graph Theory, Probability Theory, Operating Systems, Design and Analysis of Algorithms, Computer Communication and Networking, Paradigms of Programming Languages, Computer Graphics, Object Oriented Analysis and Design

Selected Projects

1: [Open Source Contribution for Network Simulator 3\(under review\)](#)

Ported a Perl script that converted a file written in the Felix Connection Vector format into a format more suitable for reading by tmix-ns using C++. Analyzed perl script code line by line and applied the corresponding C++ constructs for file handling to perform the same task. The perl script was initially used for format conversion in Network Simulator 2 but is now outdated with the coming of Network Simulator 3 which required a new format converter.

2: [Improved Security system for Automated Teller Machines](#)

Improving on the existing security system of ATMs (using 4 -digit pins), the new system assigns a user a pattern password(just like the lock screen of an android smart phone). Implemented in Java using Swing for the UI. Increases ATM security by a factor of 40 through pattern generated passwords. Used modern Software Engineering Principles with the help of UML diagrams.

3: [Blackjack Computer Game](#)

A Human versus Computer version of the popular casino game using the OpenGL API with the help of the Simple OpenGL Image Library(SOIL) for texture mapping of images onto 2 dimensional surfaces. A random number generator was used to generate card values and suites until either the player or computer won.

4: [Synthesis of Computer Music using the Chuck programming language](#)

Learned the basics behind Computer generated music,i.e., CompuMusic and developed musical compositions using Chuck, an object oriented audio programming language. Using the inbuilt classes for various instruments and programming techniques like using arrays to store frequency values along with time periods, complete score sheets were created.Music can be found [here](#)

5: [Technology review blog TechnGizmos](#)

1,20,000+ page views and 550+ likes on Facebook page. Acquired domain name www.techngizmos.com from 2012-2013. Explored and implemented various Search Engine Optimization Techniques such as link sharing, writing content based on frequently used keywords and guest posts. Modified the original XML design templates for improving user experience by adding widgets, share buttons and a comment section

6: [Unix Utility Suite](#)

An Alarm Clock, a weather forecast tool and a newsreader all under one simple GUI based Utility Suite made with the Zenity toolkit. Shell Scripts plus a Python backend for web scraping.

7: [Value Flag Length Encoding\(VaFLE\)](#)

Improved on [this paper](#) for Run Length Encoding by proposing a set of triples namely Value Flag and Length as opposed to the Value Length Pairs in the existing Modification. Provides better data compression than the algorithm proposed in the paper at the same speed as traditional RLE.

Achievements & Extra-curriculars

- Karnataka Common Entrance Test (KCET) Rank: **336**
- Joint Entrance Examination (Mains) - All India Rank: **5412**
- National Science Olympiad 2007(SOF)- All India Rank: **398**
- Selected as one among 20 teams to participate in a Make-A-Thon organized by Samsung at National Institute of Technology, Trichy using the ARTIK IoT Platform
- Won several national level competitions in drawing and painting organized in Kuwait
- Finalist in the 1st Indian edition of HP Codewars held in Bangalore
- Campus Ambassador for Bosch RBEI, NITK. Placed 1st in INFOTSAV Campus Ambassador Meet 2017 for innovative ideas
- Core Member and Publicity Coordinator of Web Enthusiasts' Club, NITK
- Junior House Captain in school

Interests

Public Speaking, Creative Writing, Poetry, Drawing, Painting, Blogging, Playing the Keyboard, Quizzing, Video Editing