Samay Gupta

**Phone**: +91 9148356222

Email: <a href="mailto:samay13g@gmail.com">samay13g@gmail.com</a>
Website: <a href="mailto:samay.netlify.com">samay.netlify.com</a>

#### SUMMARY

A keen student of Computer Sciences. Started computer programming at the age of 12. Works with Python programming language for Machine learning and network related tasks. Interested in Logic Oriented Programming puzzles and computer science related projects. Worked with OpenCV modules in both Python and C++ for image manipulation and classification programs. Also worked with Java to create Android Applications and using Python's PyGame Module to develop Graphic Applications and Games.

#### **COMPUTER KNOWLEDGE**

#### **Projects:**

- Virtual Eye: This is an assistant tool for the visually impaired. Individuals. It is programmed using a python server (with Machine Learning) and an Android client app.
- **AutoDust**: This is an IOT project that uses the power of AI to segregate waste at the very basic level. AutoDust uses a modular design approach to further improve its applicability in the future. This was showcased at NPSK Hackathon 2019 and Amrita NSO 2019.
- Classifiers: Created an image classifier modifying the existing YOLO v3 algorithm to allow ease of usage with existing codes. The classifier can identify common household objects and faces of individuals.
- **Voting Application**: This application was created using Python. It will be used for voting and counting in the upcoming school elections.
- **EventDIPS**: This is my schools in development Event Management software. For this project we are working along with CISCO to bring our project to life.
- Traffic Reduction System: This is an efficient algorithm, programmed in Python, to help reduce traffic in congested areas. This was showcased at Accolite APR Codefest 2018.
- **Arcade**: This was a school project to create a game using Python. Pygame module was used to create various graphic games such as *Pac-man* and *snake*.

- **PopN:** This is an in development community website. The current version allows users to create public/ private posts, chatrooms, group conversations and also allows users to follow their friends.
- CCTV: This was an IOT project that utilized multiple features including a dedicated server (using Apache on a Raspberry Pi). As a security system it was built to livestream a camera field and also detects any changes in surroundings.
- Sustainable Light Switch: This was an IOT project that created a motion activated light switch at an extremely low cost to reduce electricity usage.
- **Self-driving car**: This was created using the Raspberry Pi and Arduino kits. It was designed to avoid obstacles with self-navigation.
- **IOT**: This consists of many projects created using the open-source Arduino platform. This includes projects that measured distance, motion and also a model car controlled using Bluetooth.
- Check: This was a prototype application developed and showcased at Y4PT Global Public Transport Hackathon. This software aimed to unify the process of public transportation all over the world.

### Languages:

- Proficient in Python, C++, Java, HTML, SQL, PHP and Android Application development
- Familiar with JavaScript, Kotlin, CSS, Swift, C, C#, Ruby, Ajax
- **Platforms**: Microsoft Window, Hyper-V, Mac OS, Ubuntu, Raspbian, Microsoft Azure, Amazon Web Services
- Servers: Python Django, Apache

### **ACHIEVEMENTS**

- Represented India at the Y4PT Global Public Transport Hackathon held in Stockholm, Sweden. I was the IT Head for our Hackathon project Check.
- Secured 3<sup>rd</sup> position at PES University the Amateur Scientist CodeWars held in August 2019.
- Secured 1<sup>st</sup> position at Amrita NSO held in October 2019.
- Secured 1<sup>st</sup> position at National Public School Koramangala Helix Hackathon held in August 2019.
- Secured 3<sup>rd</sup> Position at SJBHS Transcendence CodeWars event.

- Developed our schools Voting Application for student council elections for the current academic year.
- Developed an Android Application based on my Virtual Eye Project Prototype.
- Secured 2<sup>nd</sup> place at Accolite APR Codefest 2018 on 18<sup>th</sup> November 2018.
- Secured Class rank 1 and State rank 5 in Silverzone International Informatics Olympiad 2018.
- Selected for Reap benefit problem solvers' club smart solutions master class on 2<sup>nd</sup> March 2017.
- Represented my school HP CodeWars Bangalore 2019.

# **Certifications:**

#	Course	Academy	<b>Completion Date</b>	
1	Python3	SoloLearn	17-Aug-2017	
2	HTML Fundamentals	SoloLearn	31-Aug-2017	
3	CSS Fundamentals	SoloLearn	17-Sep-2017	
4	РНР	SoloLearn	23-Oct-2018	
5	JavaScript	SoloLearn	11-Dec-2018	
6	Java	SoloLearn	15-Feb-2019	
7	C++	SoloLearn	5-Jul-2019	
8	Swift 4 Fundamentals	SoloLearn	6-Jul-2019	
9	SQL Fundamentals	SoloLearn	1-Jul-2019	
10	С	SoloLearn	28-Jul- 2019	
11	Ruby	SoloLearn	10-Aug-2019	
12	C#	SoloLearn	6-Oct-2019	

# **Others:**

- Self-learnt Machine Learning using python's Sklearn, Tensorflow and OpenCV modules.
- Self-learnt creation and deployment of virtual machines using Windows Hyper-V, VMWare and Virtual Box.
- Self-learnt creation and deployment of servers using Apache on Linux.
- Self-learnt creation of projects using Python's Django Module.
- Learned programming with Kotlin from SoloLearn.

# **EDUCATION QUALIFICATIONS**

Grade	Subject	Marks	Year
10	Science, Mathematics, Hindi, English, Social Science, Computer Science	87%	2018
12	Physics, Chemistry, Mathematics, Computer Science, English	N/A	2020