Padmaja Bhagwat

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Education

August 2014- **B.Tech in Information Technology**, *National Institute of Technology Karnataka*,
Present Surathkal, *CGPA − 8.28 (out of 10)*.

2014 **Second year PUC**, *Sanganabasava Residential PU College*, Bijapur,
Percentage − 95.66.

2012 **SSLC**, *St. Joseph's English Medium School*, Bijapur, *Percentage − 96.16*.

Work Experience

May 2017- **Summer Intern**, VMware Software India Pvt Ltd, Bangalore,
July 2017 Worked on **Firewall anomaly detection using ML** that involved designing a
Machine Learning model that can learn the known good practices of firewall rules.

December **Winter Intern**, 5C Networks, Bangalore,
2016 Worked on automating the brain tumor (Glioblastomas) segmentation using MRI
scans. It involved implementing an input cascaded Convolutional Neural Networks
using two pathway architecture in order to detect both local and global features of
the tumor.

May 2016 - **Summer Intern**, Unnati data labs, Bangalore,
July 2016 Worked on the **Algorithmic Music Generation** project, that involved developing
Artificial Neural Network model to generate music using deep learning in Python.
The project was aiming to generate Indian classical music based on the genre chosen
by the user without infringing the copyrights. The entire training, testing and
generation of music were done using AWS instances.
https://github.com/unnati-xyz/music-generation.

Academic Projects

October 2017 **VM Allocation using Weighted Interval Scheduling With Capacity Sharing**,
using JAVA,
This algorithm maximizes the total weights (or profits) of virtual machines allocation
in Cloud data centers by adopting capacity sharing along with weighted interval
scheduling. Final simulation was done in the **CloudSim** environment. **GitHub** link.

February 2017	**Music Recommendation System**, *using Python, HTML, CSS, JavaScript, PHP and MySQL,* The system keeps track of songs rated by customers and recommends songs based on their similarity with other customers. Other features of the website include voice recognition, lyrics translation, displaying the most trending songs. **GitHub** link.
February 2017	**Android Malware Detector**, *using Python,* Classifies the given android app into benign or malicious using the ID3 algorithm. **GitHub** link.
March 2017	**PIR based intruder detection system**, *using Python,* The system uses a PIR motion sensor to detect the presence of a person within a certain range. Once detected, lights up LEDs, sounds an alarm and notifies the authorized user through a phone call and SMS. **GitHub** link.
October 2016	**Heart Disease Predictor**, *using C and OpenMP,* The neural network model, predicts the severity of heart disease, where its training phase was parallelized using the **OpenMP API**. **GitHub** link.
April 2016	**ChitChat - The Chat Application**, *using Python,* The system uses TCP sockets for the transfer of files, in order to establish a peer to peer communication **GitHub** link.

Technical Skills

Programming Languages	Fluent: C, JAVA, Python, HTML and CSS. Familiar: UNIX Shell Script, MySQL, JavaScript and PHP.
Tools and OS	GitHub, Jupyter notebook, AWS instance, Android Studio, ArgoUML, Wireshark, Cisco Packet Tracer, OpenMP, Kali Linux, Microsoft Windows and Ubuntu.

Achievements and Awards

6th Feb 2018	Selected as a speaker for **PyCon 2018, Cleveland, USA.** *https://us.pycon.org/2018/schedule/presentation/132/*
5th Aug 2017	South Asia finalist of **PATW** competition organized by **IET.**
15th Jul 2017	Winner of local network round of **PATW** competition organized by **IET.**
19th May 2017	Gave a talk at **PyCon 2017, Portland, USA** on the improved version of Algorithmic Music Generation. *https://youtu.be/Kk33YgJuDfk*
25th Sept 2016	Gave a talk at **PyCon India 2016** on Algorithmic Music Generation. *https://in.pycon.org/cfp/2016/proposals/algorithmic-music-generation~dBrxd/*

Extra Curricular Activities

1. Took part in **6th Undergraduate Summer School** conducted by Computer Science and Automation department of **Indian Institute of Science**, Bangalore (4th July - 9th July 2016).
2. Took part in Google's Applied Computer Science with Android (ACSA) program.
3. Participated in a Hackathon conducted by **CohortPlus**.
4. Represented school in state level folk dance competition twice.