

Bofin Babu

BM 137
BITS-Pilani HYD Campus
Telengana, India

(Ph)+91 7097691400
bofinbabu@gmail.com
<https://www.bofinbabu.com>

EDUCATION	BITS-Pilani Hyderabad Campus , Hyderabad, India	June 2013 - Present
	<i>(Integrated) Master of Engineering</i> , Computer Science Specialization: Information Security	
EXPERIENCE	Mahatma Gandhi University , Kottayam, Kerala, India	June 2010 - April 2013
	<i>Bachelor of Science</i> , Physics	
SELECTED PROJECTS	Teaching Assistant	BITS-Pilani
	January 2015 - Present CS/IS C313 - Object Oriented Programming and Design. Assignment preparations, question-paper preparations and evaluations.	Hyderabad
SELECTED PROJECTS	PyARP: (https://github.com/bofinbabu/PyARP) An ARP(Address Resolution Protocol) Spoofer based on ScaPy. ARP Spoofing or ARP cache poisoning is a technique by which an attacker can alter routing on a network, effectively allowing for a man-in-the-middle attack. This python program I wrote has the capabilities of scanning an IP range and performing the ARP attack.	
	Detection of malicious domain names using Machine Learning: Various families of malware use Domain Generating Algorithms (DGAs) to periodically generate a large number of domains names for malicious purposes. With one million top websites dataset from Alexa and about 10K DGA-domains generated with a couple of DGA's, I came up with a model that detect algorithmically generated domains. The Random forest classifier was used for the classification and evaluation gave an accuracy of 97.8%. The project made use of Scikit-learn for classification.	
SELECTED PROJECTS	FilterPlus: A real-time content filtering extension for Google Chrome: Built an extension for Google Chrome which allows users to have easy control over what they wish to receive from a web page. Also build this extension in such a way that it remembers the choice of options made by the user for every URLs, thereby letting users create rules for websites they visit.	
	Automatic TV Show Highlighting : Wrote a Python program which outputs an excerpt of TV shows consisting of the highlighted parts of it.The main idea behind this program is, usually when something interesting happens during the show, the audio levels increase (up to a short period of time)from it's normal pattern due to the combined response of (live)audience. I measured those differences and cut the video properly (with transitions) to form the excerpt. Libraries used for this project include (but was not limited to) MoviePy, ffmpeg and NumPy. I also added a feature to search and fetch videos directly from YouTube.	
SELECTED PROJECTS	A SaaS Testing approach based on crowdsourcing(Research Project): In recent years the Software as a Service (SaaS) model of software flourished as organizations of different size and types are extremely interested in readily available business applications. Traditional SaaS testing methodologies in restricted environment is not sufficient to overcome SaaS challenges. In this research, I propose an efficient and cost effective SaaS testing approach using crowdsourcing followed by some techniques of effective management of crowd, based on a case study.	
	Measuring Parameters of Galaxy Clusters by Spectral Analysis using IRAF: The optical spectra is obtained from Sloan Digital Sky Survey(sdss server dr7), a project make a large part of the universe. IRAF(image reduction and analysis facility) is a product of the National Optical Astronomy Observatories (NOAO) and was developed	

for the astronomical community. I took fresh spectral data from SDSS, plotted and analysed them using IRAF.

COURSES FOR SPECIALIZATION

- BITS F345 Information Law and Cyber Law
- CS F404 Computer Crime and Forensics
- BITS F463 Cryptography
- CS G517 Network and System Security
- CS F406 Ethical Hacking
- CS G566 Secure Software Engineering
- CS F407 Database Security

SKILLS

Languages: C, C++, Assembly(MIPS), Python, SQL.

Web: HTML, CSS, JavaScript.

Applications & Tools: Vi/Vim, Eclipse, Visual Studio, Git, VMWare, VirtualBox, MySQL, Metasploit, Nmap, w3af, Zap, Scapy, Wireshark, Netcat, OpenVas, John, Burp, afl-fuzz.

Operating Systems: Ubuntu, Debian, Windows family, Android.

INTERESTS

Education & Open science, Interdisciplinary Research, Ethical Hacking, Code Review, Mountaineering, Cooking.

WORKSHOPS & CONFERENCES

- 6th IBM Collaborative Academia Research Exchange (I-CARE), IISc Bangalore, October 2014
- Winter school in Big Data Analytics and Cognitive Computing, IBM Research - India, October 2014
- "Science with Optical Spectra" - IUCAA, May 2012.
- Summer Mini-School in Astronomy - Mahatma Gandhi University and IUCAA, April 2011
- "Doorbeen", a six days telescope making camp - ISRO and IUCAA, February 2011.

Contact me for more information.

My Linkedin profile: <https://in.linkedin.com/in/bofinbabu>