Venu Vardhan Reddy Tekula

Curriculum Vitae

Area of Interests

Software Health and Evolution, Machine Learning, Open Source, Data Analytics.

Education

July 2016 - Bachelor's of Technology, Computer Science and Engineering, Amrita School of Engineering,

July 2020 Amrita Vishwa Vidyapeetham, Kollam, India. CGPA: 8.26/10.0.

2014 - 2016 **Higher Secondary**, Narayana Junior College, Hyderabad, India. Marks: 95.1%.

2014 **Secondary**, Dilsukhnagar Public School, Hyderabad, India. GPA 9.8/10.0.

Publications

2020 Iterative Text-to-Image conversion using Recurrent Generative Adversarial Models, Vinay Varma Nadimpalli, **Venu Vardhan Reddy Tekula**, Sumanth Javvaji, Sedimbi Satya Pramod, and Jyothisha J. Nair, in 3rd International Conference on Interdisciplinary Research (ICIR 2020).

Experience

November 2021 Hackathon Support Co-Chair, MSR 2022.

- Present Joined the GrimoireLab MSR Virtual Hackathon Committee Team as a Support Co-Chair for the Mining Software Repositories Conference 2022. The MSR conference is the premier conference for data science, machine learning, and artificial intelligence in software engineering.

June 2021 - Community Manager, Grimoirelab, Bitergia x CHAOSS, Remote.

Present Working on fostering and growing the GrimoireLab Community. My responsibilities include engaging the community, clarifying the doubts, and helping the new contributors. In addition, I was also involved in organizing outreach programs like the GSoD, Summer OSPP.

October 2020 - Backend Developer (Temporary), Bitergia, Spain/Remote Work.

April 2021 Bitergia helps companies and organizations by understanding and improving the software development projects that matter to them. I worked on creating an automatic packaging & release workflow of the GrimoireLab toolset using the release-tools, poetry, and github actions.

January 2019 - Open Source Contributor, Student Developer (GSoC) CHAOSS - The Linux Foundation.

September CHAOSS is an Open Source project focused on creating analytics and metrics to help and define community health. GrimoireLab is a set of free, open-source software tools for software development analytics. I work closely with the **GrimoireLab WG** that maintains the project. I also worked as a Student Developer on the project "Creating Quality models using GrimoireLab and CHAOSS metrics" as a part of the **Google Summer of Code Program 2020**.

July 2016 - Member and Student Mentor, FOSS@Amrita, Amrita Vishwa Vidyapeetham, Amritapuri.

April 2020 amFOSS (Open Source Club of Amrita) trains students to contribute to free and open-source software and skill development. I actively mentor juniors and participate in various club activities.

July 2019 - Summer School Student, Ben-Gurion University of the Negev, Beersheba, Israel.

August 2019 Got selected for a one-month summer course on Data Mining and Business Intelligence with its applications in Cyber Security at BGU, Israel.

Open Source Projects

January 2021 - release-process-automation

June 2021 Created an automatic packaging & release workflow of the GrimoireLab toolset using the release-tools, poetry, and github actions. Designed this workflow to manage the releases of GrimoireLab with proper versioning and release notes.

https://github.com/vchrombie/release-process-automation

May 2020 - Creating Quality models using GrimoireLab and CHAOSS metrics

August 2020 The main aim of the project is to design an approach to shape the GrimoireLab data in a format that can easily be consumed by Prosoul and implement it on the data obtained from a few data sources like git, github and mailing list repositories to obtain simple quality models. https://github.com/vchrombie/gsoc

May 2020 GrimoireLab: Perceval backend plugin for Zulip

Worked on creating a perceval backend plugin for Zulip data source. Perceval is the GrimoireLab component that collects data from different data sources and returns it as JSON documents. Created a set of third-party community maintained backends for Perceval.

https://github.com/vchrombie/grimoirelab-perceval-zulip

https://github.com/perceval-backends

December 2018 GitLit

It is a social networking site exclusively for OSS developers. Built with Django, GitHub GraphQL, Bootstrap, and Saas. It works by connecting enthusiastic developers to the most interesting and relevant projects and forming new communities of like-minded and passionate developers. https://gitlab.com/amfoss/gitlit

Academic Projects

September Iterative Text-to-Image conversion using Recurrent GANs (Tell, Draw, Undo, Repeat)

2019 - March Dr. Jyothisha J. Nair, Dept. of CSE, ASE, Amritapuri.

2020 Bachelor Thesis

We propose a novel Recurrent GAN model architecture that can generate 2-D images from input text in an iterative manner. This is different from the one-step text-to-image generation as the model will be given continuous instructions carrying information on how to modify the most recently generated image.

http://sersc.org/journals/index.php/IJAST/article/view/22267

August 2019 - Stock Market Prediction using LSTM

October 2019 Veena G, Dept. of CSE, ASE, Amritapuri.

15CSE481:Machine Learning and Data Mining Lab

This project is about analyzing and predicting the stock prices of Google using Artificial Recurrent Neural Network (RNN) architecture. This is a Regression problem.

https://github.com/vchrombie/shuri

July 2019 - Analysis of Phishing Detection using SHAP

August 2019 Dr. Yisroel Mirsky, Shai Cohen, Dept. of SISE, BGU, Beersheba.

I worked on the research project of BGU Cyber Labs, Phishing Detection during the Summer School program at BGU. The motive of the project to extract the important features contributing to the project and make an analysis using the SHAP tool. Used Python and Jupyter Notebooks. https://github.com/vchrombie/pd-shap-analysis

August 2018 - Malicious Web Content Detection using Machine Learning

November 2018 Dr. Sajeev G P, Dept. of CSE, ASE, Amritapuri.

15CSE265:Scientific Computing

A Chrome Extension checks the website you are browsing, and categorizes it into SAFE/MALICIOUS, using the Random Forests Model. Built using Python, PHP, HTML/CSS. https://github.com/vchrombie/cap-america

July 2018 - EcoTourism@Lambasingi Student Social Responsibility Project

August 2018 We organized a 4-day campaign to *promote cleanliness* in a *remote place Lambasingi*, which is one of the villages in Andhra Pradesh near Visakhapatnam as a part of the *SSR Project*.

Open Source Contributions

OpenSearch Dashboards, opensearch-py, Bitergia/release-tools, coveralls-python

Institute Positions

2019 **Head Coordinator**, Data Science Team | FOSS@Amrita.

2016 - 2019 **Student Coordinator**, Amritavarsham | MAM, Amritapuri.

2018 **Head Coordinator**, Social Media Team | FOSS@Amrita.

2016 - 2019 Student Coordinator, Amala Bharatham Campaign (ABC) | MAM, Amritapuri

Teaching and Mentoring

2021 Mentor, Google Summer of Code | CHAOSS. Link

2021 Mentor, Summer of Open Source Promotion Plan | CHAOSS. Link

2019 Chief Coordinator, Road To Excellence. | CIR@Amrita x FOSS@Amrita.

Talks

July 2021 Introduction to GrimoireLab and more

CHAOSS Beijing Meetup, Virtual Event. YouTube

Technical Skills

Programming Python, Java, JavaScript

OS GNU/Linux

Tools LATEX, Jupyter, Git & GitHub/GitLab, MySQL, Docker, Elasticsearch, Kibana.

Frameworks Django, Flask, Vue.js

Achievements

InCTF, 2019 Got selected for the finals after finishing the Qualifier round of Amrita InCTF 2019, India's First Capture the Flag Cybersecurity Contest.

Summer Got selected as a student to the Data Mining and Business Intelligence with application in Student, 2019 Cyber Security Summer Program at Ben-Gurion University of the Negev (BGU), Israel with 92% scholarship and 400 USD stipend.

RM Merit Academic Fee Waiver awarded based on Rudra Memorial Scholarship Aptitude Test (RM-SAT) Scholarship for three consecutive academic years (2010-11, 2011-12, and 2012-13) in high school.

Coursework

Core Courses Database Management Systems, Functional Programming, Data Structures and Algorithms, Object-Oriented Programming, Scientific Computing, Design and Analysis of Algorithms, Software Engineering, Natural Language Processing, Information Retrieval.

Lab Courses Database Management Systems Lab, Data Structure Lab, Object-Oriented Programming Lab, Operating System Lab, R for Data Science.

Languages

English Fluent

Hindi, Telugu Native