VENKATESHWARAN LOGANATHAN

Coimbatore, India ♦ +91 – 9176662877 ♦anandvenkat4@gmail.com

PROFESSIONAL SUMMARY

A multi-skilled **solutions architect** possessing around **13 years** of software development experience in **Python and Machine Learning** with good all-round ability to juggle multiple projects and meet deadlines whilst at the same time comprehending complex and interdependent business processes. Very capable with an ability to identify and then deal with a client's needs by translating them into appropriate technical solutions. Experienced in providing motivation, guidance and an up to date consultancy service to both colleagues and clients.
Experienced, self-motivated and highly organised remote worker and have experience in working as a **digital nomad.**

SKILLS

- **Tools:** Python, C++, Node.js, MySQL, Hadoop, MongoDB, Streams, Spark, AWS, Linux, Kafka, RabbitMQ, Redis, Docker, Jenkins, GIT

- **Packages:** Flask, Django, Scikit-Learn, Numpy, Pandas, Tensorflow, Matplotlib, Auth0

- **Concepts:** Data Visualization, REST API, Predictive Analytics, Web Scraping, ML Algorithms, RPA, Clustering and Classification

- **Behavioral Skills:** Project Management, Team Leadership, Business Continuity Planning, Design Leadership, Mentoring and Training

WORK HISTORY

Lead Architect – Python Backend, 08/2018 to Present
Xapo Holdings Limited, Gibraltar – Remote Job

- Involved in the extensive development of backend of bitcoin based wallet product using **Python 3x, Flask, MySQL**

- Extensively used **FLASK** technologies, a lightweight WSGI web application framework designed to **scale up complex applications** and serve million requests per second

- Refactored the entire legacy system of quotes framework, which is the **core API** behind the product

- Involved in the new architecture of the revamped product and took part in discussions concerning the security of the product

- Conformed to **REST API** standards for building up an API system to be used internally for the revival of quotes
- Worked with multiple third party payment processors to on board them into the product
- Involved in the creation of high real-time daemonized workers to keep updated with the changes in the **bitcoin currency markets**
- Designed reporting format, leveraging multiple database systems, to streamline data used by members of global product team
- Been a part of the completely **REMOTE team** and ensured high connectivity and performance throughout the development
- Very flexible with the working hours and conducted several boot camps company wide
- Manage the product-development process, from concept through introduction to market, ensuring design intention and usage
- Managed **quality assurance program**, including on-site evaluations, internal audits and customer surveys
- Resolved conflicts and negotiated mutually beneficial agreements between parties
- Developed team communications and information for daily scrum meetings

Lead Architect – Product Dev- Machine Learning, 06/2017 to 07/2018
Thickstat Inc, Indianapolis, US – Indianapolis, Indiana, US

- Involved in the complete development of a new product based on **Voice AI** using the latest available machine learning techniques
- Used Python extensively in addition to the ML packages like **Scikit-Learn, Numpy, Scipy, Pandas, NLTK, Beautiful Soup, Matplot lib** along with the integration of SQL and NoSQL databases including **MongoDB, Couch Base and MySQL**
- Experimented **Node.js** and **GO** Lang to improve the efficiency in analysing textual data for asynchronous working of application
- Engineered a complete **AI based Voice Analytics** Product extensively using **RNN and NLP**
- Dockerised the entire application and implemented CI/CD Workflow using **Jenkins**
- Employed advanced text mining algorithms to facilitate the identification of search intent latent in individual keywords
- Provide **technical leadership** to a strong team of data scientists, engineers, and analysts
- **Founding Member** of the start-up, taking part in the all-round setup and development of the company
- Fast-moving, developer-driven organization full of brilliant and ambitious people
- Instrumental in setting up a complete off-shore team of 15 members from scratch

Solution Lead – Python, IoT, Streams Processing, 12/2012 to 05/2017
Cognizant Technologies Solutions US Corp – Bentonville, Arkansas, US

- Design and Development of the real-time analytics system, **Walmart Alarm Response Processing** - WARP using **Python and IBM Streams**.
- Worked extensively in the conversion of analog sensors to digital sensors for the real-time data collection from the live stores to **identify anomalies and raise alarms**
- The turnaround time is greatly reduced in the new system as the data streams are processed in real time and there is no dependency on vendor specific alarm processing
- The Sensor Data Streams are consumed by Streams Application in real time from **Kafka** topics which are extracted from Walmart Stores by the Data Extractor
- The data streams are enriched, processed and fed to the Rules Application for validation.
- Extended the solution to run in **500 live stores**
- **Saved $1Million** by reducing food wastage by implementing cost-saving initiatives that addressed long-standing problems
- In depth analysis of previously implemented solutions and their drawbacks
- Developed POCs and performed trial runs to prove the success of the solution
- Involved in multiple projects that were developed and deployed at scale: **Automation of Cognizant Laptop Tracking System, IBeacons for Pervasive Advertising, Google glass and Drones for Insurance Crowd Sourcing Ideation for effective claim approval and Wearables for Health Monitoring**
- Deployed Large Scale applications in the AWS cloud using various **AWS** components and ensured a complete 99.7% uptime application using DR and Fault Tolerance

Senior Engineer- Technology – Python, C++, VPN, 07/2011 to 12/2012
Virtusa Software Solutions – Chennai, Tamilnadu, India

- Implementation of a **virtual private network (VPN)** that uses a public telecommunication infrastructure, such as the Internet, to provide remote offices or individual users with secure access to their organization's network
- The goal of the VPN is to provide the organization with the same capabilities, but at a much lower cost.
- Golden Frog is a VPN service provider named **"VyprVPN"** who offers the VPN service as an outsourced facility.
- The project involved in creating the client software for the VyprVPN services in the Unix and Mac OS involving **C++, Python, Shell Scripting, BitRock Installer**
- Developed code for the network protocol part which comprises of **OpenVPN, PPTP**
- Research on various networking technologies for the product
- Created and Maintained installer with BitRock install builder
- Solved many critical issues and cracked few tough networking technologies
- Performed **Unit and regression testing** on the product

- Ensured on-time, quality release of systems and components
- Provided IP management leadership and oversight of the software development process
- Oversaw design of applications from functional and technical specifications

Product Engineer - Backend – Python, PERL, Moodle 05/2010 to 07/2011
NuVeda Learning Private Limited – Chennai, Tamilnadu, India

- Design and develop software for a product specializing in measuring the learning outcomes
- Worked on integrating Moodle's web service with the **PERL** catalyst environment and **Python** to develop a comprehensive **Learning and Content Management System(LCMS)**
- Responsible for hosting and backend maintenance of the system
- Worked extensively on Linux Platform, thereby gaining knowledge about Unix operating system
- Have experience in modelling and handling huge databases as a part of the project requirement
- Evaluated Assessment Engine to provide "**Proof of Concept**" for application that allows user to take up assessments and scoring them
- Worked extensively on **"Reporting Engine"** which comprehends the learners' data in a neat presentable form
- Developed **"Web Services"** in Moodle to integrate with PERL for better CMS

Systems Engineer – Router Networks – C++, Python 06/2018 to 05/2010
Infosys Technologies Solutions – Bangalore, Karnataka, India

- Solving change requests and bugs raised by designers, product testers and customers
- Applied knowledge of **C++, Graph Traversal algorithms, and parallel computing** to develop a feature in production code for the main project
- Feature Enhancements as part of new releases
- Involved in Unit, System Integration and System verification and SOAK testing in the security domain
- Effectively participated in **Code Inspections for CRs, enhancements, features and other technical discussions**
- Continuously contributed to wiki with my learning's in the project
- Actively participated in KM sessions and team building activities
- Additional responsibility of Lab Prime for the team and Daily Activity Reporting police

EDUCATION

Ph. D – Computer Science and Engineering, 05/2019
Shri Venkateswara University
- Coursework in Research Methodology, Computer Applications and Review of Research Work
- Defended thesis on the Topic "**Certain Investigations on Load Balancing and Job Scheduling in Cloud Environment**"
- Graduated with First Class

MS – Software Systems, 05/2015
BITS Pilani
- Continuing education in Software System Development
- Work Integrated Learning Program offered within the industry by the experts from the industry
- Graduated with **7.51 GPA**
- **First Class with Distinction** grade

B.E – Computer Science and Engineering, 05/2008
Anna University

- Elected to President for Association of Computer Science Engineers in 2007
- Graduated in **Top 1%** of Class
- Awarded the best out-going student of the year
- Graduated with **83%**
- **First Class with Distinction** grade

PUBLICATIONS

- Authored the book by the name "**PySide GUI Application Development**" by PACKT Publishing, **ISBN 9781849699594** focusing on the GUI development toolkit for Python. http://www.packtpub.com/pyside-gui-application-development/book

- Co-Authored the second edition of the book "**PySide GUI Application Development**" by PACKT Publishing, ISBN **9781785282454** focusing on the GUI development toolkit for Python. https://www.packtpub.com/application-development/pyside-gui-application-development-second-edition

- Venkateshwaran L and N.Krishnaraj , "**A Review on Challenges in Load Balancing and Integrity in Cloud Environment**", Journal of Applied Science and Computations, Volume 3, Issue 2 July - December 2016.
- Venkateshwaran L and N.Krishnaraj , "**Improving the Quality of Service in Cloud Environment**", International Journal of Management, Technology And Engineering, Volume IX, Issue I, January - 2019.

CONFERENCES

- Provided hands-on training in the International Conference "**Euro Python 2014**" at Berlin on the topic "**PySide - Develop System GUI".**

  https://ep2014.europython.eu/en/schedule/sessions/17

- Venkateshwaran L and N.Krishnaraj , "**An Intelligent Scheduling Algorithm for Prioritizing and Scheduling the Jobs in Cloud**", International Conference on Emerging Multidisciplinary Research and Computational Intelligence (ICEMRCI-2016) , S.R.K.R Engineering College, Bhimavaram during December 2016

- Venkateshwaran L and N.Krishnaraj , "**Efficient Load Balancing and Scheduling Algorithms for the Resources in Cloud System**", International Conference on Telecommunication, Power Analysis and Computing Techniques (ICTPACT), Bharath Institute of Higher Education and Research during April 2017.