MURUGESAN THIRUVALLUVAN

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I am a senior software engineer with a good set of skills for building and enhancing systems. I am quite confident in solving any practical problem using codes. I enjoy being a full stack developer using JAVA, Python and Node js with angular 6 and above.

Education:

Graduate Diploma in Systems Analysis

Aug 2014-Nov 2015.

National University of Singapore (Institute of System Science)

Bachelor of Engineering [Mechanical Engineering]

Aug 2009-May 2013.

Anna University Chennai (Sri Krishna College of Engineering and Technology)

Work Experience:

NTUC LHUB - Senior Python developer (Consultant):

Mar 2021 - Current

Consultant for design and development of NTUC Learning hub (National Learning platform) using Open-EDX open source project.

Held responsible for the following:

- Conduct Code review of fellow developers for code quality of Django and MAKO templates.
- Scrutinize vendor developed feature for merging into dev pipeline.
- NE-SSO Integration into LXP-XP system so that users can use the same login across NTUC platforms. used FLASK, Python 3, Django 2.x, Docker, MY-SQL, etc.
- MY-INFO Integration for easy verification of user profile, Certificate generation later.
- Import external courses like TMS, GO1 into the new LXPXP system.
- Developed search API for the integration of proprietary (LMS) and External Courses (TMS/GO1 etc)
- SCID system for Customer Resource Management.
- Develop Integration API to ease the mobile team consumption.
- Developed key features like career goal, Course Tagging, Banner and more.
 More details in this link https://www.ntuclearninghub.com/

UOB - Senior Python developer (Full stack):

Nov 2019 - Mar 2021

Responsible for SMART application development widely used under the production work space of UOB.

- Worked as Lead Developer for Network modules used under various branches in and around globe for checking security compliance of each and every device like routers, Switch, Firewall etc set by local governing authority (eg MAS in SG). Used Netmiko, Django, MSSQL and multi process spawning to achieve concurrency and performance of the system.
- Took Lead role to design and develop a mitigation server for checking the performance and health of CONTROL-M (bank's background task server). This will help to keep service availability 24*7.
 Extensively used Django 1.11,2.2 with python (2.7,3.8) on backend. HTML5, JavaScript, Bootstrap and CSS on frontend. Aldon tool for shipping the code, BMC patrol for notifications, Django rest framework for API.

GlobalFoundries - Software Developer:

March 2017 - Nov 2019

Worked with client @ Globalfoundries in Python's Django framework, HTML5/Angular js in Linux Environment under Global Tape-out operations/ Design Enablement team for Semiconductor Design. Held responsible for:

- Migration from angular 1.x to angular 1.5.6 in the entire project(ORC,DRC)
- Migration from bg-grid to ui-grid in job report pages across the project.
- Migration to higher version bootstrap 3.3.7 from 2.x.
- Develop backend serviceAPI in python django 1.10 for enhancements.
- Fix bugs raised as hot fixes in production.
- Improve performance of worklist loading in Optical Rule Check Apps using tastypie and celery.
- Worked in detail with ng-csv, flow.js and angular file upload and django file upload packages.

LEO TECH - Junior Java Developer:

Jan 2016-Jan 2017.

My Wallet Plus is an E-Wallet application currently used for paying bills, Booking tickets and for making fund transfer & settlement using Banks. Connect and Pay is the core back end used to connect service providers and payment partners seamlessly. My Wallet Plus is currently used in Myanmar. For more details follow this

https://www.techinasia.com/leo-tech-connectnpay-digital-payments-singapore-myanmar

Technology - Groovy Grails/Spring MVC backend , Angularjs frontend and Mysql for Database. Held responsible for:

- Sprint planning Estimating development tasks and creating tickets in JIRA and physical board.
- Development Take a priority development task (either front end or back end) and resolve them.
- Proposed and implemented a new solution for Export use case that had more than 1 million records. Previously it caused Glassfish server crashing due to JVM memory leak in production environment.
- Bug fixing- Solve bug tickets raised in production and support application bi-weekly.

Land Transport Authority - Intern Developer:

Apr 2015-Aug 2015.

Developed a new Test Automation Server using C#.NET for Bus Fare collecting devices. Previous automation tool was developed in C++ and was slow. Since it used third party tools (Test Shell). Held responsible for:

- The New tool that I developed improved performance time from 4 to 2 seconds. We split the UI to open source Robot framework and Logic(backend) to C#.NET 4.0.
- The project reused many decoding files previously developed in C++ and had flexibility to test all other devices like Top- Up, General Ticketing machines and Gates used at MRT stations.
- In total project had a potential of saving 360,000 SGD.
- Awarded "Accenture Prize" for best internship project by NUS-ISS.

ABT Maruthi Suzuki - Graduate Trainee:

Sep 2013-Mar 2014.

Involved in troubleshooting and maintaining vehicle history using proprietary ERP tool.

Technical Skills:

Languages JavaScript, Java, Python, Linux Scripting.

JavaScript Technology Node.js, Socket.io, express, Angular.js(6 and 1.5.x), React.js Ember.js, Backbone.js

JAVA Technology J2EE, J2SE, spring, Groovy, JPA, Hibernate, JSP, JAX- Rs, JSP, EJB, JUnit

Front End Technology Angular 6, React JS, Angular js 1.8, Cordova, HTML5/CSS3, Bootstrap, UI-Grid,

JavaScript, Jquery, JSON, AJAX, XML, SAP Crystal reports.

Background Task

(Scheduler)

Django-Chroniker, Celery, CONTROL-M

Databases Mysql, MSSQL, Mongodb.

AWS Tools EC2, SNS, SQS, RDS, S3, Data Dog.

Tools GitHub, Tortoise SVN, Mercurial, Jenkins, JIRA, Visio 2013, Rational Rose,

MS-Office, Enterprise Architecture, Rational Rose, Test Shell, Robot framework.

Development Skills Object Oriented Design, Waterfall Methodology, RUP Incremental, Agile scrum,

SOA, Concurrent Engineering.

IDE Pycharm, Intellij-IDEA, Eclipse, Netbeans, Visual Studio 2013, QNX Momentics,

Eclipse, VS Code,

Achievements:

• Won DBS Hack2Hire hackathon #2 place

Oct-2021

Awarded "Accenture Prize" for best internship project in my batch by NUS-ISS.

 Awarded "The best project award" for the Design and Fabrication of automatic matchstick filling machine in Bachelor of Engineering.

May-2014

Key Software Projects:

- Angular 6 MEAN STACK with angular material design
 Created a Bug tracker using MEAN stack with angular 6 and Node js. Created UI components using
 Angular material design. Created Components for listing of bugs on page load, editing on click of the bug
 and creating new bug from listing page. Currently working on user based preference
 (https://github.com/a0123055u/Angular-6App-)
- Spring Boot Application using HTML5, Bootstrap 3.3.7 and Spring 2.1.7 Aug 2019
 Developed a spring boot application for weather forecast with MongoDB. The System will interact with external REST API of Dark Sky and get the current weather forecast. If the data is not present in the MongoDB then will be saved in MongoDB and will be rendered for next consecutive calls on the day. If data is older than 3 days. A Scheduler task will purge the data in MongoDB. Currently I am integrating React in Front end. (https://github.com/a0123055u/Climate)
- React application hosted in (AWS) Amazon EC2 machine

 Created a single page react application by interacting with WeatherOne external API. Used components to display on the main page. Used a static method to display static parameters in GUI. The user should key in city and country, Which will in turn return climate parameters. Hosted the server in Amazon Web Server EC2 for real time demo. Source code repo:(https://github.com/a0123055u/climate-react-app-.git).
- Bus Arrival based on bus stop using LTA DATA MALL API
 Created Python Django 1.10 single page application project for data analytics and frequency finder for bus stops near check post. Used LTA Data MALL API for live data and stored all the data in My SQL DB. Found that the frequency of bus during peak and off peak hours.(https://github.com/a0123055u/Django-with-External-Api)
- Chat Application using Node.js, Socket.io, Express and Mongodb. Dec-2015
 Created a multi-user chat application using socket.io functions. Used express to support
 server hosting and scaffolding. All the messages are stored as collections in Mongodb. Whenever the
 client connect to the server last 100 messages in the conversation are loaded in the text window. Also
 used code ship for continuous integration. (https://github.com/a0123055u/Chat-Application-.git).

Certification

 Completed Certified Scrum Developer provided by Scrum Alliance. License number 540738, https://www.scrumalliance.org/community/profile/tmurugesan3

Co-Curricular Activities

- Got Rock and Roll "Mr. FEST-E-COLE" award for personality test conducted at National Institute of Technology, Trichy, India.
- Completed Brahma Gahanna and Arulnithiyar (Teacher training) course in Simplified Kundalini Yoga (SKY) organized by World Community Service Centre, Conducted at Aliyar, India. April-2013

Languages known

- Proficient in English ,Tamil with good writing ,speaking skills
- Completed A1 Level in German Language.