Francis Penetrante

91D F. Manalo St. Calzada,Tipas Taguig City * +63 917 512 3972 * fcpenet@gmail.com

Career Summary

Software Engineer with 13 years of experience in the IT Industry, specializing in ReactJs and NodeJs as a Full Stack Developer - always hungry for new challenges and technologies. Aims to be an ever evolving individual able to answer obstacles presented by the growing IT industry. Learning never stops!

Core Competencies

- Google Cloud platform
- NodeJS
- Python
- Typescript
- OOP
- Clean Code
- Agile Development

Professional Experience

Eclaro/ SPINS, Quezon City

Senior Software Engineer, Mar 2022-Present

- ◊ Lead to the design and implementation of an ETL pipeline that uses the combination of Google Composer, Apache Airflow's Directed Acyclic Graphs (DAGs), Google Buckets, Google BigQuery, Snowflake, python, GraphQL and strawberry.
- ◊ Enabled data transfer between different data sources like Snowflake, BigQuery and AWS
- ◊ Created Directed Acyclic Graphs (dags) that is used for big data ingestion deployed in Google Composer and Airflow using Python
- ◊ Created client facing grapqhl endpoints to trigger DAGs using Python and the strawberry library
- ◊ Created and deployed GCP cloud functions that is automatically triggered via file upload in the google cloud storage using Python and functions framework library.
- ◊ Used bitbucket and terraform to manage google cloud platform services and resources such as Google Secrets, BigQuery tables and databases, IAM policies and permissions as well as Snowflakes' schema, databases, integration storages, stages and tables.
- ◊ Created private shares and listings used to share large amounts of data to clients using Snowflake's console, SnowSight.
- ◊ Facilitated the data transfer and sharing between Google BigQuery and Snowflake using SQL scripting.
- ◊ Created Hubspot Email template for automating sending of marketing email to clients. Also worked on automatic population of client details using NodeJS and the Hubspot CRM.
- ◊ Migrated a GCP Workflow process into GCP Composer/Airflow process that improved the ingestion process from 12hours to 3hours.
- ◊ Practices XP/Pair programming agile technique to minimize pull requests resulting in faster feature delivery hitting most deployment deadline 90% of the time.
- ◊ Developed responsive client-side Web Applications using ReactJS that are unit tested using react testing library with a 90% baseline coverage rate.
- ◊ Developed APIs using ExpressJS Framework that can be queried using Graphql that is unit tested using jest with a 90% baseline coverate rate. These APIs are secured using Auth0.
- ◊ Deployed at least 1 API Graph and 2 API subgraphs in Apollo Federation.
- ◊ Uses NX to manage a monorepo that contains all necessary resources for a single application. Resources such as frontend code for web application and backend code for API graphs as well as cloud functions source code are managed in a single repository.
- ◊ Uses multiple Google Cloud Platform services to deploy and manage web applications. Some of the most used GCP services are cloud run/functions, secret manager, artifact registry, app engine, workflows.
- ◊ Automated deployment of at least 4 applications and cloud runs/functions in multiple environments such as dev, uat and prod using CircleCI. The deployment flow includes running of unit tests and building the applications. The number of manual deployments was reduced to zero.
- ◊ Created a GCP workflows to integrate two separate applications deployed in two different cloud services, namely GCP and AWS, to streamline the process of data. This workflow is triggered via GCP Pub/sub that reduced the number of hours needed to complete the data refresh by 72 hours per period refresh.
- ◊ Supported an existing python application using Amazon web services such as lambda, step functions, cloud logging, and queue.

◊ Trained 3 junior developers in Python and Reactjs for two months before being deployed to client.

Satellite Office/ AXI, BGC

API Developer, Dec 2020-March 2022

- Used kotlin/spring-boot for API development
- Created automated regression tests using karate and docker for containerization
- Setup CI/CD pipeline in Azure
- Design API based on the given requirements using stoplight studio
- Spearheaded automation for service deployment
- Used Mockoon and docker compose for software testing
- Used Solace pubsub for event based flows
- Used Karate framework for regression testing
- Used docker for containerization of tests and application

RED Asia Inc, Makati City

Software Developer, Sept 2018-Nov 2020

- Frontend Developer: Angular/typescript along with Redux and NGRx for the development of the user interface for a website used by internal clients.
- Backend Developer: Uses python and frameworks like Serverless to develop functions deployed on cloud (Lambda) to create RESTful APIs.
- DevOps: manages some AWS services such as EC2, Dynamodb, Cloudwatch, CloudFront, CloudFormation, Lambda, Code Build, S3, IAM.

Mapua University, Intramuros Manila

Senior Science Research Specialist, March 2017-Sept 2018

- Uses C++ and Python frameworks such as pandas and psycopg2 with Object Oriented Programming for the Development of High Frequency Doppler Radar Ship Detection Algorithm for the Philippine Navy
- Uses Python with Django framework as backend and React.js as frontend to create a web app as the user interface for the project
- Transition from Django to MERN(mongodb, expressjs, reactjs, nodejs) stack.
- Does radar maintenance with the team in multiple sites in Zambales
- Trains the team members to use the C++ and Python Language with Object Oriented Programming
- Create documentation and reports regarding activities held in the field and in training.

Igen Dev Center, Makati

Software Engineer, Nov 2015-April 2017

- Uses C++ with Object Oriented Programming for the Development of Projects
- Uses MySql for storing and fetching data
- Meet with project manager to know the specific details of the project/applications.
- Design Software Architecture based on client specifications that is easily extensible and requires minimal modification in the future.
- Break down tasks into small and more quantifiable items.
- Estimate agreeable effort and time for the items defined.
- Develop efficient application that would fulfill client demands with minimal defects reported by the QAs.
- Deliver output on or before the estimated time frame.
- Develop fast and safe solutions for bugs/defects reported by the QA team.
- Conduct code reviews for codes created by other team members with Clean Code Principles as the main standards.
- Write functional design document that fully covers features, attributes and limitations of the provided application.
- Collaborate with other team members on other sites thru the use of version control applications like Git and SVN.
- Do unit testing for the fixes before any commit.
- Use JIRA to update the tasks assigned.

Networklabs Inc, Technohub Ayala, QC
Research and Development Engineer, June 2014-Nov 2015

- Created solution for bugs found in code after testing using our tool for continuous development.
- The solutions are in a form of code that makes use of the Standard Template Library of C++ like std::vectors, std::maps etc.
- The solution also makes use of the Boost library for better memory management.
- It is then uploaded in the repository for further testing. Testing is done automatically after each successful commits.
- Create Unit Tests using C++, Test Driven Development(TDD)
- The tests are created before the solution code as a standard rule for Test Driven Development.
- The tests made use of the GoogleMock library for various reasons like mocking and data validation.
- Different kinds of tests were made including parameterized tests for repeating tests but with different parameters and normal tests with assertions.
- Agile Method Is used
- Solutions are provided in mini code and are immediately tested with each commit.
- A standard time of 2-3 weeks is given for each given sprint.
- Reviews of the results and process are made after each sprint.

NEXUS RESEARCH INTELLIGENCE CO , Makati
Junior Software Developer, January 2013-Jun 2014

- Develop web crawlers using C# .NET
- Data Analyst used to collect data from the internet manually that usually takes one person a month to complete, by developing web crawlers that we call Harvesters, the tasks is usually done within one day.
- The Harvesters use libraries such as System.Web and System.Net for POST and GET requests.
- Web crawlers return different data structures such as JSON and XML, or sometimes just a HTML page, in which we usually use System.Xml or JsonFX and Newtonsoft libraries to parse the data.
- Web crawlers use XPATH for data that is in XML form
- Web crawlers use Regex for bad data
- These services are programs that help in the production area
- One service is an emailer that sends notifications for processed files
- Creating unit testing for the windows services using Mock and built in testing classes in C# .Net
- Programs developed such as windows services and Harvesters are tested using unit testing.
- Some of the libraries used are Microsoft.VisualStudio.TestTools.UnitTesting and Moq.

TRENDMICRO PHILIPIPNES (TRENDLABS), Ortigas
ANTI-MALWARE TRAINEE, January 2012 - May 2012

- Used Assembly language for creating detection pattern
- Debugging simple malwares
- Creating scan and clean patterns
- Creating an in-depth analysis of infectors, Trojans and worms
- Efficient use of hacker's view(HIEW) and other debugging tools such as Ollydbg and IDAPro
- Making a fast but reliable malware analysis through surface analysis
- Working in teams as well as having individual tasks

Education

Mapua University, Makati

Master of Science Major in Computer Science, Jul7 2017 - Present

- Specializing in Artificial Intelligence. Familiar with concepts like neural networks implementation such as Convolution Neural Network.
- Ongoing research for topic to be used in thesis, leaning towards application of Sentiment Analysis in the business domain.

Mapua Institute of Technology, Intramuros, Manila

Bachelor of ComputerEngineer, November 2011

- Thesis Design : Development of a Third Party Software With Neural Network Aid for E-Nose Using Acoustic Wave Sensors -- CYCU, Taoyuan County Taiwan.

Additional Skills

- Additional Languages learned: C# .NET, Objective C (iOS), Assembly Language 16bit and 32bit
- IDEs used: VIM, Notepad++, Sublime
- Familiar with UNIX setup environment
- Languages: Proficient in English, Minimal working knowledge of Nihonggo
- CI (Continuous Integration): Git, SVN, Concourse, CircleCI, Jenkins, Jira, Redmine