# **IBEAWUCHI B. ANOKAM**

Information is offered on a need to know basis

Online Portfolio: https://ianokam.github.io/online-portfolio/

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### **OBJECTIVE:**

Seeking to professionally grow my technical skills in DevOps or Test Automation.

# SUMMARY OF SKILL SET:

- Extensive experience in Requirements Analysis, from high-level requirements to low-level requirements to manageable MVP tasks in a modern Agile process.
- Expert in modern SAFe methodology, best practices and implementation.
- Extensive experience in documenting RVTM (Requirements Validation Traceability Matrix) as well as other system flows/design/architect artifacts.
- Expert in modern Agile Software Development Lifecycle Management (SDLC) by applying BDD (Behavior-Driven Development) and TDD (Test-Driven Development) techniques
- Extensive experience designing, architecting, and testing automation scripts in the GUI layer and the API (Service) layers of the Test Pyramid for web applications and desktop applications.
- Fluent in modern programming languages such as Python, Shell Scripting, and C++.
- Adept in utilizing AWS resources and services.

### **DEGREES & CERTIFICATION:**

Information is offered on a need to know	M.S. in Computer Science	e	December	, 2021
Information is offered on a need to know	B.S. in Electrical Engineer	ering	December	, 2017
COMPTIA Security+ SY601 - In Verify at: <a href="https://verify.CompTIA.org">https://verify.CompTIA.org</a>	formation is offered on a need to know ba	sis	October,	2022
SAFe 5.1: Certified SAFe 5 Agilist -	Information is offered on a need to k	now basis	February	, 2022
<b>AWS Certified Solutions Architect -</b>	- Associate.	Expect to be certified by	: February	, 2024

# TECHNICAL SKILLS:

# **✓** Operating Systems:

Linux, MacOS, Windows

#### **✓** Cloud Environments:

Amazon Web Services (AWS)

### **✓** Command Line Interfaces:

Linux Terminal (e.g. GNU BASH), Cygwin, Windows Command Prompt, AWS CLI

### **✓** Command Line Interfaces: Software & Tools

yum, apt, vim, git, ssh, sshpass, puTty, bash scripts, batch scripts

### **✓** Desktop Graphical User Interfaces: Software & Tools

XCode, Visual Studio, Visual Studio Code, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Remote Desktop, BBEdit, Icon Slate, Adobe Acrobat, Adobe Photoshop, Adobe Illustrator

# **✓** General Software Development Languages & Libraries

Python, Tkinter, HTML, CSS, JavaScript, JQuery, BootStrap, nodeJs, C++, wxWidgets, Java, MATLAB, SQL, Markdown, YAML

# **✓** Build & Package Management Tools

venv, setuptools, pip, twine, npm, yarn, maven

### **✓** Test Automation-Specific Languages & Libraries

Cucumber, Playwright (Typescript), request, cURL, PyTest, Catch2, Junit, Chrome DevTools

### **✓** DevOps-Specific Languages & Libraries

gitlab-ci.yml, Jenkins, Jenkinsfile, Docker, DockerFile, Kubernetes, Helm, Helm Chart, Ansible, Terraform

# ✓ Version Control Systems & Artifact Management Systems: Languages, Software's, & Tools

Git, GitHub, Gitlab, CodeArtifact

### **✓** Project Management Tools

Trello, Jira, Confluence

### **✓** Collaboration Tools

Slack, Cisco Webex, Skype, Zoom, Microsoft Teams, Microsoft Outlook

### **✓** Development Methodologies

SCRUM Agile, SAFe, BDD, TDD, ATDD

#### **✓** MCU Hardware Platforms:

Arduino, Raspberry Pi, Texas Instruments Launchpad

# WORK EXPERIENCE:

# Software Test Automation Engineer

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May 2022 - Present

- Collaborate with fellow test automation engineers in SCRUMs to perform backlog grooming and to develop solutions for user stories in an Agile environment
- Design, develop, execute, and maintain automated software testing suites with the necessary tools and environment
- Create graphical user interfaces to execute the automated test scripts during local runs
- Create concise documentation to service the present and future phases of the software development life cycle
- Performed UI and API testing against web applications
- Demonstrated expertise in executing highly effective BDD test automation frameworks with Cucumber and the Gherkin language, incorporating Page-Object-Modeling

- Manage and monitor the health and status of system processes/software to ensure the ingest of time critical data
- Ensure deliverables are received within the purview of the job-specified guidelines, policies, and procedures
- Collaborate with other professionals, in a timely manner, to provide the highest level of quality in service
- Troubleshoot system issues to ensure operations are nominal
- Identify problem areas in the system and implement solutions to enable faster and smarter business outcomes

# Teaching Assistant, Graduate Assistantship Program Bowie State University—Bowie, MD Aug. 2020 - May 2021

- Teach and oversee lab activities for the fundamental undergraduate-level Computer Science courses
- Assist instructors with teaching courses, exam proctoring, record keeping, and other relevant tasks
- Assist students with their questions and concerns during office hours via Blackboard Collaborate and other campus communication networks
- Presently teaching and assisting students to apply the fundamentals of C++ to design, implement, and run efficient, clear, and concise C++ programming code

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September 2017 - Aug. 2020 January 2017 - Aug. 2021

October 2014 - Aug. 2021

### Mathematics / C++ Tutor

- Tutor students in Pre-Algebra, Algebra, Geometry, Trigonometry, Pre-Calculus, Calculus, Discrete Mathematics, and Probability and Statistics
- Provide coding assistance for students using MATLAB and C++
- Proctor examinations for the math classes

# Project Lead, Undergraduate Research

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January 2017 - Dec. 2017

- Managed a team of 3 individuals to ensure project deliverables were met on time, managed the budget, and acted as the main programmer of the project
- Designed a wireless sensor network with temperature sensors to ascertain real-time room temperature trends and to analyze the data to improve the efficiency of the air conditioning and heating of rooms
- Programmed in Python on Raspberry Pi Zero's Linux environment and programmed in C/C++ on Arduino's integrated development environment

### Scientific Programmer, GEAR-UP Program

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May 2017 - July 2017

- Worked with university professors at the United Arab Emirates University for the research of a microfluidic device for the focusing and separation of particles flowing through a microchannel by-way-of their dielectropheretic properties
- Modeled the optimization of the particle separation trajectories with MATLAB
- Research was published in the "2018 International Conference on Manipulation, Automation and Robotics at Small Scales (MARSS)" and is available in the IEEE Xplore digital library:

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# **PROJECTS:**

### **GUI & CLI Software Development**

### Student Database program

March 2020 - May 2020

- Developed a command-line program that populates a database system via text files
- The database allows users to add and delete students from the list, make changes to each student's class list, and prints the student list
- Programmed on Windows using C++ / Visual C++ in Visual Studio and ported to MacOS via XCode

- Developed a window-based GUI arithmetic software calculator with a 7-digit 9-character input and a 10-digit floating-point output value range of plus or minus (  $1.000000 \times 10^{\circ}(-6) \le value \le 9.999999999 \times 10^{\circ}(8)$  )
- Program is a cross-platform, operating on MacOS and Windows operating systems
- Programmed in C++ in addition to using the wxWidgets library and respectively illustrated and outputted the programs icon with the use of Adobe Photoshop and Icon Slate

### Data Set Operations program

November 2019 - Dec. 2019

- Designed a cross-platform 3-function command-line set operations program
- Program analyzes two data sets and allows the user to performed the set operations intersection, difference, and cardinality while also checking to see if two set difference operations output the same elements
- Programmed in C++ on XCode for MacOS and ported to Windows using C++ / Visual C++ in Visual Studio

# **Website Development**

### Math Notes Database Web Development Project

July 2018 - January 2019

- Designed and developed a responsive website where users can access a collection of math tutoring notes, study tips, and other math resources
- Programmed in HTML, CSS, and JavaScript with the use of the JQuery library and created the sites' logo and illustrations with the use of Adobe Photoshop and Illustrator

Website: https://ianokam.github.io/

## Online Portfolio SDLC Project - (work in progress)

September 2021 - Present

- Planned, designed, and developed a single-page static website for displaying the programing work and hobbies I've done written with HTML, CSS, and JavaScript with the use of the JQuery library and created the websites' logo and illustrations with the use of Adobe Photoshop and Illustrator and version controlled the code with GitLab
- Set up a CI server with Jenkins to automate build and test stages and to allow the manual deployment of the website
- Provision and Configure an NGINX web server that pulls down the website code, makes it browser accessible, and tests the website with the utilization of Terraform, Ansible, and Python code
- Integrated Slack into the CI server as an alert and incident management system to provide feedback on the status of the CI build, test, and deployment stages
- Utilized AWS Cloud resources to generate the web testing server and the artifact repository
- Setup UI test automation for the website using Gherkin and the Python-based library Behave for V&V
- Deployed the single-page static website to GitHub Pages

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### **Embedded Systems Programming**

Multi-Ultrasonic Sonar Sensor	- Radio Communication Project	Jan. 2018 - Feb. 2018
Multi-Old asoliic Soliai Selisoi	- Serial Communication Project	Oct. 2017 - Nov. 2017

- Programmed two Texas Instrument's Launchpad microcontrollers to communicate each other's measurements of an objects distance
- Measured the distance of objects within a 2 to 400-centimeter range of each microcontroller
- Relayed measurements to the adjacent microcontroller through a serial connection of the microcontrollers by- way-of their transmission and receiver pins
- Relayed measurements to the adjacent microcontroller through radio communication with a NRF2401+ 2.4GHz wireless RF transceiver module
- Programmed in the C/C++ based Energia programming language