

## OBENG FRANCIS

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### RESEARCH INTEREST

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Software engineering (architecture, fault tolerance, automation), edge computing, mobile computing, and Digital Education.

### CURRENT RESEARCH PROJECT:

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I have developed an automated program analysis tool (WEBSERVFH) for automatically analyzing a large dataset of open-source web service applications to identify exception-handling strategies implemented in these OSS codebases for further statistical analysis.

### EDUCATION

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#### Virginia Tech. University

Ph.D. Computer Science (CGPA, 3.667)

Advisor: Dr. Eli Tilevich

Blacksburg, VA, USA

January 2023

#### University of Education

B.S Info. Technology Edu. (CGPA, 3.67)

Winneba, Ghana

Aug 2015 – July 2019

#### Enchi College of Education

Diploma in Basic Education

Enchi, Ghana

June 2009 – July 2012

### SKILLS SET

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Programming Languages: C++, Java, HTML, CSS, SQL, PHP, and Python.

Research Tools: SPSS, LaTeX (Overleaf), JMP, and Tableau.

IDEs: VS Code, Sublime Text Editor, IntelliJ IDEA, Jupyter and PyCharm.

Version Control (Collab. Tools): Git, GitHub, and GitLab.

Design: Figma.

### PROFESSIONAL EXPERIENCE

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#### Virginia Tech. University

Graduate Teaching Assistant

Blacksburg, VA, USA

Present, 2023.

**Courses:** (Graduate and Undergraduate level courses).

- Mobile Application Development
- Web Application Development
- Professionalism in Computing(2x)
- Software Engineering
- Introduction to Software Design

- Leading Programming Lab sessions twice per week for the entire semester.
- Holding office hours to assist students in overcoming their challenges in the course project.
- Reviewing students' applications (software) development process to ensure it aligns with project requirements (App Reviews).
- Grading student's assignments and projects for the assigned course.
- Reporting on students' graded assignments and projects.

**Obuasi Senior High Technical School**

Obuasi, Ash – Ghana

Information Technology Instructor

Oct. 2019 – Dec 2022

- Instructing high School students in C++, QBasic programming, HTML, CSS, Access, and SQL Database.
- Evaluating learner's academic performance through exercises, assignments, and projects.

**West Africa Examination Council**

Obuasi, Ash - Ghana

Assistant Examiner

Nov 2020 – Dec 2022

- Grading students' examination scripts in information and communications technology.
- Recording students' scores for onward processing by the examination council.

**Ghana Statistical Service**

Asokwa, Ash – Ghana

District IT Officer

June 2021– Nov 2021

- Training supervisors and enumerators on the use of census technological tools such as tablets, laptops, and Computer-Assisted Personal Interviewing (CAPI) software.
- Supervising the transfer/syncing of census data from tablets and laptops to the national data warehouse/data center.

Interviewer

April 2018–June 2018

- Interviewing respondents in the assigned enumeration area on the census of agriculture.
- Transfer of census of agriculture data collected to the national data center.

Interviewer

June 2017 – Oct 2017

- Interviewing respondents in the assigned enumeration area on the maternal mortality survey by using Computer-Assisted Personal Interviewing (CAPI).
- Transfer/syncing of maternal mortality survey data collected to the national data center.

**Ghana Education Service**

Ashanti region-Ghana

Professional Info. Comm. Tech. Instructor/Teacher

Sept 2012 – Aug 2015

- Instructing Junior High/Middle school (age: 11, 12, 13, 14, and 15+) students on computer hardware, computer software, internet usage, word application, and spreadsheet data analysis.
- Evaluating learners computing knowledge and skills through assignments, exercises, project work, and examinations.

## **CLASS AND PERSONAL PROJECTS**

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- BookStore E-commerce Project: an e-commerce website project for the Web Application Development course.
- Website and Guest House Reservation
- School Website and Exact Application System Prototype.
- Online Bus Ticketing System; an undergraduate capstone project.

## **RESEARCH LICENSES**

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- Financial Conflict of Interest Training Requirement for Sponsored Research.
- Information Privacy and Security (IPS).
- Basic Responsible Conduct of Research.

## **ONLINE COURSES ON COURSERA**

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### **University of Michigan**

Programming for everybody (getting started with Python)

Ann Arbor, Michigan

June 2021 – July 2021

Web Application Technologies and Django

June 2023

### **University of Illinois**

Data Visualization

Urbana-Champaign

June 2021 – July 2021

### **DeepLearning.AI**

Artificial Intelligence for Everyone

USA

May 2023

### **University of Pennsylvania**

Introduction to Python Programming

USA, Pennsylvania

July 2023

**University of London:** Introduction to Network Security

UK, England

**Microsoft:** Intro. Computers and Operating Systems and Security

Aug 2023.