Tobi Popoola

Software Engineer

✉ tobipopoola@u.boisestate.edu

📞 1-208-488-1964

📍 6017, W. Opohonga Street, #104 Boise, ID, 83704

EDUCATION

BOISE STATE UNIVERSITY
GPA: 3.91

Boise, ID
Doctor of Philosophy (Ph.D.) Computer Science Candidate (Expected graduation Aug 2022)

Relevant Coursework
- Design & Analysis of Algorithm
- Parallel Computing
- Adv Software Engineering
- Programming Language Translation-Compilers
- Advanced Operating Systems
- Advanced Programming Languages
- Numerical Methods I
- Machine Learning
- Distributed Systems
- Numerical Methods II
- Computer Architecture

Awards & Honors
- President's Award, Idaho Entrepreneur Challenge 2020
- Health Track Runner Up, Idaho Entrepreneur Challenge 2020
- Semi-finalist, Boise Startup Week, 2020.

Extracurricular Activities
- President,National Society of Black Engineers
- Boise State University, Men's Soccer (Retired)
- Umoja Football Club, (Active)

UNIVERSITY OF LAGOS

CAREER OBJECTIVE

Results-oriented professional with 10+ years of experience and a proven knowledge of application development, advanced technology, and compiler optimizations.

EXPERIENCE

GRADUATE RESEARCH ASSISTANT
Boise State University, Boise, ID / Aug 2019 - Present
- Research in high performance computing, compiler optimization research and performance benchmarking.
- Researching automated code translation approaches to optimize HPC applications at the compiler-level.
- Developing a C and Fortran compiler front end using the LLVM infrastructure to implement various IR compiler optimizations.
- Implementing Sparse Polyhedral Model generation from C.
- Researching Inspector/Executor code generation for sparse format conversion
- Support for Code Generation in IEGenLib (https://github.com/BoiseState-AdaptLab/IEGenLib)

RESEARCH AIDE INTERN
Argonne National Lab, Lemont, IL / May 2020 - Aug 2020
- Work in collaboration with Tensor Algebra Compiler group (MIT/Stanford University) to develop a plugin that supports embedding tensor algebra directly in C/C++
- Contribute to Syntax Plugin in Clang/LLVM (https://github.com/hfinkel/llvm-project-csp)
- Work with supervisors on a research publication.

GRADUATE TEACHING ASSISTANT
Boise State University, Boise, ID / Aug 2018 - Aug 2019
- Teaching Assistant CS121 (Introduction to java) Fall 2018
- Teaching Assistant CS253 (Introduction to Systems Programming) Spring 2019
- Teaching Assistant CS253 (Introduction to Systems Programming) Summer 2019
- Teaching Assistant CS450/550 (Programming Language Translation) Spring 2021.

TEAM LEAD / LEAD DEVELOPER- LIVELDY
Macropax Solutions Limited, Abeokuta, Ogun State / Jun 2020 - Present

Akoka, Lagos
Computer Engineering Computer
Engineering (Jan 2016)

ADDITIONAL SKILLS

English- Business Level Speaking, Reading and Writing

Yoruba- Business Level Speaking, Reading and Writing

CERTIFICATIONS

CUAHSI Short Course: Integrated Simulation of Watershed Systems Using ParFlow

PUBLICATIONS

Finkel, H., McCaskey, A., Popoola, T., Lyakh, D., & Doerfert, J. (2020). *Really Embedding Domain-Specific Languages into C++*. Retrieved from http://arxiv.org/abs/2010.08439

POSTERS

- T. Popoola, *Specialized Interprocedural Analysis for Scientific Applications*, Boise State Graduate Showcase, https://scholarworks .boisestate.edu/gss_2019/94
- T. Popoola, *Sparse format conversion and code synthesis*, Research Computing Days, Boise State, https://www.boisestate.edu/rcs/2020/01/16/research-computing-days-february-11-12-a-call-for-posters/#posters

- Responsible for designing and Implementing a Telehealth app that lets people chat/video call doctors in Nigeria. (https://liveldy.com)

- Responsible for Designing and Implementing the Android mobile app for this platform (https://play.google.com/store/apps/details?id=com.liveldy)
- Responsible for designing and maintaining machine learning models to recommend users to new medical doctors.
- Providing support and maintenance to Liveldy Mobile / Web App that currently have 2,235 users.

GAME DEVELOPER- SHANDI
Macropax Solutions Limited, Abeokuta, Ogun State / December 2019 - Present
- Responsible for designing and Implementing Shandi mobile game. (https://macropax.net/shandi)

- Responsible for Designing and Implementing the Android mobile app for this game. (https://play.google.com/store/apps/details?id=com.shandi)

- Responsible for collaborating with graphics developers to implement add-ons in the game.

LEAD DEVELOPER
SeekRealE, Lagos, Lagos / Oct 2017 - Dec 2019
- Responsible for designing and maintaining http://www.seekreale.com

TEAM HEAD IN A CONTRACT JOB (PHONE IT (TM))
Macropax Solutions Limited, Abeokuta, Ogun / Jul 2016 - Dec 2019
- Responsible for building an USSD banking system to provide mobile banking services in Nigeria
- Responsible for communicating with the project's client and creating requirement documents from conversations.

CHIEF TECHNICAL OFFICER
Beattraffik, Yaba, Lagos / Jan 2016 - Jul 2017
- Responsible for designing and developing a navigation app to beat traffic in Lagos, Nigeria.

REFERENCES

AMIT JAIN, Chair, Associate Professor, Boise State University
(208) 426-3821 - ajain@boisestate.edu - Professor

CATHERINE OLSCHANOWSKY, Assistant Professor , Boise State University

(208) 426-5730 - catherineolschan@boisestate.edu - Academic Advisor