

# OLUWAMAYOWA ADE ADELEKE

+1-832-208-4499 || 12006 STARBOARD DR, APT 401, VA, 20194, USA

[oluwamayowa.adeleke@gmail.com](mailto:oluwamayowa.adeleke@gmail.com) || [oluwamayowa.com](http://oluwamayowa.com) || <https://bitbucket.org/oadele3>

## Interests

Software Engineering, Computer Networks Programming, Cloud computing, Internet of Things (IOT). Networks Analytics and Machine Learning, Software Defined Datacenter Networks.

## Education

- Aug 2016 - Dec 2020 **PhD in Computer Science**, *University of Houston, Houston, TX. GPA: 3.86/4.0*
- Jan 2014 - Dec 2014 **MS in Electrical and Computer Engineering** *University of Illinois, Chicago, IL. GPA:3.71/4.0*
- Nov 2005 - Dec 2010 **BS in Electrical and Electronics Engineering**, *LAUTECH, Nigeria. GPA: 4.31/5.0*

## Skills & Knowledge

Python, C, C++, C#, java, Matlab, go, Bash, MIPS, Verilog  
Machine Learning & Analytics, Tensorflow, Numpy, PyTorch, Sklearn, pyplot, plotly dash, forecasting, time series, hypothesis testing, classification, clustering, regression analysis  
Network Programming & systems programming, SDN, TCP/IP, AF-XDP, DPDK  
Cloud computing, AWS, Google, Azure, Kubernetes, Service Fabric  
Virtualization, Xen, Vmware, Docker, Puppet, Linux & Unix systems administration  
Databases & Big Data, MySQL, Postgres, Hadoop, Spark, parallel computing (CUDA)

## Professional Experience

- Jan 2021 - date **Amazon Web Services, Herndon, VA. Software Development Engineer II**  
Design and development of features for a network intrusion detection / firewall service.  
Planned and Implemented cost saving mechanisms to save the team over 5million monthly
- May 2019 - Aug 2019 **Microsoft Inc., Redmond, WA. PhD Software Engineer Intern** (Azure Compute)  
Developed a new cloud service using service fabric for migrating groups of customer PaaS deployments across physical clusters in Azure Compute, improving load distribution.
- May 2018 - Aug 2018 **Intel Inc., Hillsboro, OR. PhD Network Software Eng. Intern** (Network Platforms Group)  
Developed a continuous integration test system for a future Network card driver, using python, bash, Jenkins, Robot Framework, and SIMICS. Developed AF\_XDP self-tests for Linux kernel source
- Feb 2015 - June 2016 **Amazon Web Services, Herndon, VA. Cloud Developer Support Engineer.**  
Contributed visualization code (asynchronous javascript) for the VPN troubleshooting tool.  
Assisted enterprise level clients in troubleshooting network connection problems and AWS networking related services (load-balancers, DNS, NICs, NATs, firewalls, VPNs)

## Academic Experience

- Fall 2016 - Date **University of Houston, College of Technology Teaching Fellow / Research Assistant.**  
Teaching a 31-student class of seniors as instructor for computer networks  
Research project applying Machine Learning to network traffic analysis, prediction & generation.

## Samples of Programming Projects

- A parallelized implementation of Aho-Chorasick string matching algorithm for NVIDIA GPUs (C ++)
- An Implementation of the Pentium M Processor Branch predictor, (C)
- Implementation of a simple DNS service for an Academic cloud testbed environment.

## Sample Publications

1. O. A. Adeleke, N. Bastin, D. Gurkan, (2021) A Survey on Computer Network Traffic Workload Generation Techniques. (Accepted) - ACM Computing Surveys (CSUR) 2021.
2. O. A. Adeleke, N. Bastin, D. Gurkan, (2020) Network Testing Using a Novel Framework for Traffic Modeling and Generation, (ICCCN 2020) August 2020, Honolulu, Hawaii, USA
3. O. A. Adeleke, (2019) Echo-State Networks for Network Traffic Prediction 2019 IEEE 10th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON).

## Awards

- 2013 **Postgraduate Scholarship Awards, NITDA**
- 2006 **Undergraduate Scholarship Awards, NNPC / ExxonMobil Producing.**