Alemnew Sheferaw Asrese

Kijanpitäjäkuja 4A 15
02770 Espoo, Finland
+358 456 987 878
alemnew.asrese@aalto.fi
alemnew.github.io

Education

2014 – expected 2019	**Doctoral Candidate in Networking Technology**, *Aalto University, Finland*. Dissertation: Quality of Experience (QoE) Inference for Web Applications based upon Active Network Measurement Advisors: Jörg Ott and Pasi Sarolahti
2011 – 2014	**M.Sc. in Computer Science**, *University of Trento, Italy*, *GPA – 99/110*. Thesis: Design and Development of Dynamic Fleet Management System Prototype Advisor: Alberto Montresor
2007 – 2010	**B.Sc. in Information Science**, *Adama University, Ethiopia*, *GPA: 3.9/4.0*. Thesis: Online Voting System for National Electoral Board of Ethiopia. Advisor: Belayneh Mengistu

Work Experience

2014 –   **Doctoral Candidate & Researcher**, AALTO UNIVERSITY, Esooo, Finland.
- Researched factors that affect and measured Web Performance and Quality of Experience.
- Instructed and assisted laboratory lessons of two master level courses.
- Developed Web Performance and QoE measurement tool.
- Performed technical presentations at international conferences and seminars.

2013 – 2014   **Software Developer – Intern**, NEC LABORATORIES EUROPE, Germany.
- Designed and implemented algorithms for dynamic fleet management system.
- Designed and implemented a communication platform for electric vehicles by extending the C2X-sdk functionality for vehicle to vehicle and vehicle to infrastructure communication.

Mar – Jul 2012   **Web Developer & Programmer**, GREENPREFAB, Rovereto, Italy.
- Designed and implemented a cloud-based solution and web portal for civil engineers and architects to do green building rendering and energy efficiency simulation.

2010 – 2011   **Graduate Assistant**, ADAMA SCIENCE & TECHNOLOGY UNIVERSITY, Adama, Ethiopia.
- Instructed both theoretical and laboratory lessons for bachelor students.
- Designed and implemented a Malaria Expert System.

Skills

- Programming in Java/JEE, Python, Android, Shell scripting, C, C++
- Web development technologies: JBOSS, Apache Tomcat, JSP, HTML5, CSS3, JavaScript, JQuery, Ajax
- Machine learning, data analysis and visualization in Jupyter, Python, Pandas, SciKit-learn
- Version control using GIT
- Good knowledge of computer networks and internet protocol
- Knowledge of database systems
- Knowledge of virtualisation in docker, and test automation in selenium
- Knowledge of continuous integration, delivery and deployment
- Good technical presentation
- Fluent in English

Selected Projects

- WebLAR: Measuring Web Latency, ATF, and Rendering (using py, sh, Java, js, docker)

- WePR: Web performance and rendering measurement system (using c, py, Java, sh)
- Library Management System (using Java/JEE, MySQL, JSP, XML, CSS and js)
- Tewahedo Android App
- Bilingual Malaria Expert System (using Java, HTML, CSS, JS)

Selected Publications

1. A. S. Asrese, *et. al.* Measuring Web Latency and Beyond: Methods, Tools & Longitudinal Dataset. IEEE TNSM, June 2019.
2. A.S. Asrese, *et. al.* Measuring Web Quality of Experience in Cellular Networks. PAM 2019.
3. D. N. da Hora, A. S. Asrese, *et. al.* Narrowing the gap between QoE and QoS metrics for Web applications. PAM 2018.
4. E. A. Walelgne, A. S. Asrese *et. al.* A Clustering Model to Predict the Data Usage Patterns of Geographically Diverse Mobile Users. In: IEEE JSAC (). (Under review).

References

Jörg Ott
Technical University of Munich, DE
ott@in.tum.de

Pasi Sarolahti
Aalto University, FI
pasi.sarolahti@aalto.fi

Vaibhav Bajpai
Technical University of Munich, DE
bajpai@in.tum.de