

UMAR FAROOQ

(857) 763-9738 ♦ ufaro001@ucr.edu
226 Winston Chung Hall, UC Riverside
Riverside, CA - 92521

RESEARCH INTERESTS

I am interested in program analysis and testing, especially in applying these techniques to mobile (Android) platforms to optimize their resource consumptions and responsiveness.

EDUCATION

University of California Riverside
PhD Computer Science and Engineering

Sep 2016 - Present
Riverside, CA, USA.

- **Advisor:** Dr. Zhijia Zhao
- **Courses:** Compiler Construction, Adv. Computer Architecture, Adv. Operating systems, High Performance Computing, Software Verification Techniques, Data mining, Web Search & Information Retrieval, Adv. Computer Networks, Network Routing.

Virtual University of Pakistan
B.S. Computer Science

Sep 2008 - Aug 2012
Lahore, PK

- **Related Courses:** Software Engineering, Data Structures, Algorithms, Theory of Automata, Computer Architecture, Computer Networks, Operating Systems, Web Programming, Human Computer Interaction.

PROJECTS

DroidPerf: Android CPU and I/O Governors Performance

- DroidPerf benchmark and compare Android CPU and I/O governors for given workloads using ARM based CPU performance counters.

Product2Vec: Retail Store Mining

- Product2Vec converts the retail store products to vectors and measures their similarity.

MIPSim

- MIPS simulator with custom designed ISA that can simulate Pipeline, Branch Prediction, Cache and Tomasulo(Non-speculative).

E-Commerce Search Engine

- A search engine capable to search and provide related items based on the relationship of items.

Home Automation

- Implemented data storage and MQTT protocol for communications among IoT devices, server and Android platform app.

PROFESSIONAL EXPERIENCE

University of California Riverside
Graduate Researcher

Sep 2016 - Present
Riverside, CA USA

- Design and develop novel techniques for mobile(Android) apps optimization

aliftek Inc.
Software Engineer

Jan 2013 - Jun 2016
Lahore, PK

- Developed apps for iOS and Android, as well as web apps with HTML5, JQuery & AngularJS.

TkXel Pakistan
Software Engineer

Mar, 2012 - Dec 2012
Lahore, PK

- Developed apps for mobile and web platforms.

PROGRAMMING SKILLS

Java, C, C++, C#, Python, JavaScript, PHP, Android SDK.

TEACHINGS & INVITED TALKS

Android Applications: Design and Development,
Moreno Valley School District(MVSD), Teachers Training Program

Nov. 2016, Sept. 2017
Moreno Valley CA, USA

- Instructor for teachers training sessions

Android Applications Development
Virtual University of Pakistan

Summer 2012
Lahore, PK

- Instructor for undergraduate level class

AWARDS AND HONOURS

Deans Fellowship Award, UC Riverside (2017-2018)

University Merit Scholarship. Virtual University of Pakistan (2010-2012)