

# ADRIANA SEJFIA



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## RESEARCH INTERESTS

Software Architecture  
Software Engineering  
Recommender Systems  
Vulnerabilities

## LANGUAGES

Java  
Python  
PHP (basic)



[asejfia](#)

## STANDARD EXAM SCORES

**TOEFL:** 118

**GRE**

Verbal Reasoning: 163

Quantitative Reasoning: 158

Analytical Writing: 5

## EDUCATION

### PHD IN COMPUTER SCIENCE • MAY 2023 • USC

Adviser: Nenad Medvidovic

Research Focus: vulnerabilities, software architecture and recommender systems

### MSC IN SOFTWARE ENGINEERING • MAY 2018 • RIT

College Delegate of Class of 2018

Courses taken: Knowledge Processing Technologies, Process Engineering, Software Evolution and Re-engineering, Web Technologies, Foundations of Software Engineering, Software Modeling

GPA: 4.0

### BS IN INFORMATION TECHNOLOGY • MAY 2015 • RIT IN KOSOVO

Valedictorian of Class of 2015

Courses taken: Client-side programming; Server-side programming; Databases and Data Modeling; Discrete Mathematics; UX Design; Design of Health Information System in Kosovo (Thesis); Introduction to Multimedia.

GPA: 4.0

## EXPERIENCE

### RESEARCH ASSISTANT • USC • AUGUST 2018

Work with different projects focus in software architecture and vulnerability detection, using architecture recovery techniques, program analysis and machine learning.

### RESEARCH ASSISTANT • RIT • JANUARY 2017

Assist Professor Mehdi Mirakhorli at RIT as a part-time employee in his research, mostly dealing with architectural issues, including vulnerability prediction and traceability in the source code.

### FOUNDER/MEMBER • GIRLS CODING KOSOVA • FEBRUARY 2014 – JUNE 2016

Girls Coding Kosova is a local NGO in Kosovo which I helped found and grow. The NGO's main goal is to help girls improve their programming skills while delivering practical apps that solve everyday problems.

## PUBLICATIONS

### ESEC/FSE • 2019

Achilles' Heel of Plug-and-Play Software Architectures: A Grounded Theory Based Approach

### ECASE WORKSHOP • 2019

A Pilot Study on Architecture and Vulnerabilities: Lessons Learned

### JOURNAL OF SYSTEMS AND SOFTWARE • 2018

An Empirical Study of Tactical Vulnerabilities

### ICSA • 2017 (BEST PAPER AWARD)

Understanding Software Vulnerabilities Related to Architectural Security Tactics: An Empirical Investigation of Chromium, PHP and Thunderbird

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## PROJECTS

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### **TWEET SENTIMENT ANALYSIS • 2018-ONGOING**

This project aims to perform real-time sentiment analysis on tweets coming out of Kosovo, as part of a volunteer experience for TLP scholars.

### **PATCHILYZER TOOL • 2018**

Patchilyzer is a tool that traces known vulnerabilities across releases of a software product, by building ASTs of the versions involved in the vulnerability and using an algorithm to trace similarities between that and a subject version. This tool was built as part of my master thesis.

Technologies used: Java, Git

### **TOOLSHARE WEB-APP • 2016**

Toolshare is a web application that supports sharing tools with members of the same community, defined based on zipcode. This was developed as part of the Foundations of Software Engineering class.

Technologies used: Python, Django, Bootstrap, SVN

### **SAM2017 WEB-APP • 2016**

SAM2017 is a web application built to enable participant in a conference to submit papers and enables the organizers to assign reviewers and have the papers reviewed. This app was developed as part of the Software Modeling class.

Technologies used: Python, Django, Bootstrap, Git

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## VOLUNTEER EXPERIENCE OR LEADERSHIP

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### **OPEN DATA ACTIVIST IN KOSOVO**

Open Data Kosovo is an NGO based in Kosovo that aims to open up and make data about Kosovo, in particular the government, more presentable and easily accessed by the people of Kosovo. Together with ODK, we visualized procurement data from different municipalities in Kosovo.

### **DIGITAL KOSOVO AMBASSADOR**

Kosovo, as a new country, is yet to be recognized by all the other countries in the world. Digital Kosovo was an initiative that aims to facilitate the process. The platform created under Digital Kosovo served as a 'mailman' for people from Kosovo to send their requests to add Kosovo in websites in the list of countries to different organizations and companies across the world.

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## AWARDS AND SCHOLARSHIPS

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### **ANNENBERG FELLOWSHIP • 2018 • USC**

A fellowship funding my PhD studies at USC

### **TLP SCHOLARSHIP WINNER • 2016 • USAID**

A competitive scholarship funded jointly by the governments of Kosovo and US to fully cover tuition and living expenses for graduate studies in the US

### **NEXT GENERATION SCHOLARSHIP WINNER • 2014 • IPKO FOUNDATION**

A competitive scholarship funded by the Kosovar IPKO foundation granted to students who can demonstrate creativity, drive and ground-breaking ideas

### **OUTSTANDING SCHOLAR • 2014 • RIT KOSOVO**

A competitive scholarship granted annually by RIT-Kosovo based on academic excellence to one student in the student body, covering 100% of the tuition

### **BEST IN GENERATION SCHOLAR • 2013 • RIT KOSOVO**

A competitive scholarship granted annually by RIT-Kosovo based on academic excellence to one student per generation, covering 60% of the tuition

### **MERIT BASED SCHOLARSHIP • 2012 • RIT KOSOVO**

A scholarship granted to RIT-Kosovo students based on GPA