

# Camilo ESCOBAR-VELÁSQUEZ

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Systems and Computing Engineering Department  
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## Education

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### **Ph.D. (Student), Engineering, 2019-Now.**

Universidad de los Andes  
Field: Automation of Software Engineering Tasks  
*Advisor:* Mario Linares-Vásquez

### **M.Sc., Software Engineering, 2017-2018.**

Universidad de los Andes  
*Advisor:* Mario Linares-Vásquez  
*Thesis Title:* Automatic Analysis of Android Closed-Source apps to Support Software Engineering  
Tasks: The Mutation Testing Case

### **B.S., Systems and Computing Engineering, 2012-2016.**

Universidad de los Andes  
Minor: Mathematics  
*Advisor:* Jose Tiberio Hernández

## Research Experience

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### ⊗ **Graduate Teaching Doctoral Assistant**

The Software Design Lab - Universidad de los Andes  
Jan. 2019 - Present

### ⊗ **Graduate Research Assistant**

The Software Design Lab - Universidad de los Andes  
Jan. 2017 - Dec. 2018

## Teaching Experience

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### ⊗ **Teacher Assistant**

Automated Testing - MISO4208  
Masters in Software Engineering - Universidad de los Andes  
Jan. 2018 - Present

### ⊗ **Lab Instructor**

Design and Analysis of Algorithms

Systems and Computing Engineering Undergraduate Program - Universidad de los Andes

Jan. 2017 - Jun. 2017

## **Professional Service**

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### **Student Volunteer**

⊗ The 34th IEEE/ACM International Conference on Automated Software Engineering - ASE'19 - November 2019 - San Diego, CA, USA

⊗ The 41st ACM/IEEE International Conference on Software Engineering - ICSE'19 - May 2019 - Montreal, Canada

⊗ The 34th IEEE International Conference on Software Maintenance and Evolution - ICSME'18 - October 2018 - Madrid, Spain

### **Talks**

⊗ **Enabling Automated Software Engineering Tasks for Closed-Source Android Apps**

70th Anniversary of Research and Creation at Universidad de los Andes - November 2018 - Bogotá, Colombia

## **Honors and Awards**

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### ⊗ **ACM SIGAI travel scholarship**

*Travel support to assist to The 34th International Conference on Automated Software Engineering* 2019 - San Diego, CA, USA

### ⊗ **Google Latin American Research Award**

Awarded Project: *Enabling Automated Software Engineering Tasks for Closed-Source Mobile Apps* 2019-2020 - Bello Horizonte, Brasil

### ⊗ **PhD Studies Scholarship**

Universidad de los Andes

2019 - Bogotá, Colombia

### ⊗ **Google Latin American Research Award**

Awarded Project: *Enabling Automated Software Engineering Tasks for Closed-Source Mobile Apps* 2018-2019 - Bello Horizonte, Brasil

### ⊗ **1st Place Team Competition**

Testathon - Chapter 30

April 2019 - Bogotá, Colombia

⊗ **1st Place Hackaton Against Human Trafficking**

FIND: A Technological Environment to fight Human Trafficking

November 2018 - Bogotá, Colombia

⊗ **Master Studies Scholarship**

Universidad de los Andes

2017-2018 - Bogotá, Colombia

## Refereed Journal Publications

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[j1] **Escobar-Velásquez, C.**, Linares-Vásquez, M., Bavota, G., Tufano, M., Moran, K., Di penta, M., Vendome, C., Bernal-Cardenas, C., Poshyvanyk, D., "*Enabling Mutant Generation for Open- and Closed-Source Android Apps*", in IEEE Transactions on Software Engineering 2020 (TSE'20) - Early Access

## Refereed Conference Publications

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[c6] Bello-Jiménez, L., **Escobar-Velásquez, C.**, Mojica-Hanke, A., Linares-Vásquez, M., "*Hall-of-Apps: The Top Android Apps Metadata Archive*", in Proceedings of the 17th International Conference on Mining Software Repositories 2020 (MSR'20) - Data Showcase Track, Seoul, South Korea, October 5-11, 2020.

[c5] Trujillo, M., Linares-Vásquez, M., **Escobar-Velásquez, C.**, Dusparic, I., Cardozo, N., "*Does Neuron Coverage Matter for Deep Reinforcement Learning? A Preliminary Study*", in Proceedings of the 2nd Workshop on Testing for Deep Learning and Deep Learning for Testing 2020 (DeepTest'20) - Research Track, Seoul, South Korea, October 5-11, 2020.

[c4] **Escobar-Velásquez, C.**, "*Source-Codeless Testing for Android Apps*", in Proceedings of the 13th IEEE International Conference on Software Testing, Validation and Verification 2020 (ICST'20), Doctoral Symposium, Porto, Portugal, October 24-28, 2020.

[c3] **Escobar-Velásquez, C.**, Osorio-Riaño, M., Linares-Vásquez, M., "*MutAPK: Source-Codeless Mutant Generation for Android Apps*", in Proceedings of the 34th International Conference on Automated Software Engineering 2019 (ASE'19), Tool Demo, San Diego, CA, United States, November 11-15, 2019.

[c2] Ravelo-Méndez, W., **Escobar-Velásquez, C.**, Linares-Vásquez, M., "*Kraken-Mobile: Cross-Device Interaction-based Testing of Android Apps*", in Proceedings of the 35th International Conference on Software Maintenance and Evolution 2019 (ICMSE'19), Tool Demo, Cleveland, OH, United States, October 2-4, 2019.

[c1] Linares-Vásquez, M., Bavota, G., **Escobar-Velásquez, C.**, "*An Empirical Study on Android-Related Vulnerabilities*", in Proceedings of the 14th International Conference on Mining Software Repositories 2017 (MSR '17), Research Paper, Buenos Aires, Argentina, May 20-21, 2017.

## **Presentations**

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[p3] **Escobar-Velásquez, C.**, Osorio-Riaño, M., Linares-Vásquez, M., "*MutAPK: Source-Codeless Mutant Generation for Android Apps*", in Proceedings of the 34th International Conference on Automated Software Engineering 2019 (ASE'19), Tool Demo, San Diego, CA, United States, November 11-15, 2019.

[p2] Ravelo-Méndez, W., **Escobar-Velásquez, C.**, Linares-Vásquez, M., "*Kraken-Mobile: Cross-Device Interaction-based Testing of Android Apps*", in Proceedings of the 35th International Conference on Software Maintenance and Evolution 2019 (ICMSE'19), Tool Demo, Cleveland, OH, United States, October 2-4, 2019.

[p1] **Escobar-Velásquez, C.**, Linares-Vásquez, M., "*Enabling Automated Software Engineering Tasks for Closed-Source Android Apps*", 70th Anniversary of Research and Creation at Universidad de los Andes, Bogotá, Colombia, November 21, 2018.