

# Ayaan M. Kazerouni

<http://people.cs.vt.edu/ayaan/>

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## RESEARCH INTERESTS

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I am broadly interested in software engineering and computing education. I identify effective and ineffective software development practices using quantitative and qualitative empirical software engineering methods like IDE-log analysis, software repository mining, and semi-structured interviews. My goal is to develop pedagogy or tooling that uses this information to provide students with formative feedback about their software development habits.

## EDUCATION

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### Ph.D. Computer Science

2015–2020

Virginia Tech

GPA 3.86/4.0

### B.S. Computer Science

2011–2015

University of West Georgia

Honors College

GPA 3.71/4.0

## RESEARCH EXPERIENCE

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### Quantifying the programming process to help teach incremental development

Fall 2015–present

Virginia Tech

Advisors: Dr. Clifford Shaffer, Dr. Stephen Edwards.

- Model the programming process in terms of *time management*, *software testing*, and *debugging* behaviors
- Design and deploy just-in-time interventions to help developers avoid bad practices
- **2nd best research paper**, SIGCSE 2019
- **1st place**, SIGCSE 2018 Student Research Competition

### CodeWorkout: Online drill-and-practice programming environment for novices

Spring 2016–present

Virginia Tech

Advisor: Dr. Stephen Edwards.

- Integrated with other educational tools using LTI, and in use at several US universities
- Github: <https://github.com/web-cat/code-workout>

## TEACHING EXPERIENCE

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### Instructor

Summer 2018, 2019

Virginia Tech

Course: Data Structures & Algorithms

### Graduate Teaching Assistant

Fall 2015–Spring 2016

Virginia Tech

Office hours, automated tests for grading. Course: Data Structures & Algorithms

### Undergraduate Teaching Assistant

August 2012–April 2015

University of West Georgia

Courses: Intro to CS, CS 1, CS 2, Web Development, Software Engineering

## PROFESSIONAL EXPERIENCE

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### Front End Development Intern

Summer 2017

Zappos.com, Las Vegas, NV

- Worked on an infrastructure redesign of the Zappos and 6pm desktop and mobile sites

- Technologies used: React, Redux, ES6
- Owned product review search feature on Zappos.com

## PEER-REVIEWED PUBLICATIONS

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### Conference Papers

T. Price, D. Hovemeyer, K. Rivers, A. C. Bart, G. Gao, **A. M. Kazerouni**, B. Becker, A. Petersen, L. Gusukuma, S. H. Edwards, D. Babcock. "ProgSnap2: A Flexible Format for Programming Process Data (to appear)". *ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, July 2020.

J. C. Davis, D. Moyer, **A. M. Kazerouni**, D. Lee. "Testing Regex Generalizability And Its Implications: A Large-Scale Many-Language Measurement Study". *IEEE/ACM International Conference on Automated Software Engineering (ASE)*, November 2019.

S. H. Edwards, Krishnan P. Murali, **A. M. Kazerouni**. "The Relationship Between Practicing Short Programming Exercises and Exam Performance". *ACM Global Computing Education Conference (CompEd)*, May 2019.

**A. M. Kazerouni**, C. A. Shaffer, S. H. Edwards. "Assessing Incremental Testing Practices and Their Impact on Project Outcomes". *ACM Technical Symposium on Computer Science Education (SIGSCE)*, February 2019. **2nd Best Research Paper**.

**A. M. Kazerouni**, C. A. Shaffer, S. H. Edwards. "Quantifying Incremental Development Practices and Their Relationship to Procrastination". *ACM Conference on International Computing Education Research (ICER)*, August 2017.

**A. M. Kazerouni**, C. A. Shaffer, T. S. Hall, S. H. Edwards. "DevEventTracker: Tracking Development Events to Assess Incremental Development and Procrastination". *ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, July 2017.

### Abstracts and Posters

**A. M. Kazerouni**. "Toward Continuous Assessment of the Programming Process". *ACM Conference on International Computing Education Research - Doctoral Consortium (ICER)*, August 2019.

**Ayaan M. Kazerouni**, Rifat Sabbir Mansur, Stephen H. Edwards, Clifford A. Shaffer. "Student Debugging Practices and Their Relationships with Project Outcomes". *ACM Technical Symposium on Computer Science Education – Poster (SIGSCE)*, February 2019.

**A. M. Kazerouni**. "Toward Continuous Assessment of the Programming Process (Abstract Only)". *ACM Technical Symposium on Computer Science Education - Student Research Competition (ICER)*, February 2018. **1st Place**.

## HONORS AND AWARDS

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<b>Graduate Student Service Award</b> <i>Department of Computer Science, Virginia Tech</i>	2020
<b>2nd Best Paper Award, Research Track</b> <i>ACM SIGSCE Technical Symposium</i>	2019
<b>1st Place in the SIGSCE Student Research Competition</b> <i>ACM SIGSCE Technical Symposium</i>	2018
<b>2nd Place in the College of Math and Science Research Day</b> <i>University of West Georgia</i>	2015
<b>Outstanding Honors Junior</b> <i>University of West Georgia</i>	2014
<b>Outstanding Honors Sophomore</b> <i>University of West Georgia</i>	2013

## MENTORING

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<b>Jackson Wonderly</b> <i>Currently at MicroStrategy</i>	MS, 2019
<b>Hamza Manzoor</b> <i>Currently at Facebook</i>	MS, 2019
<b>Rifat Sabbir Mansur</b>	PhD, ongoing

## SERVICE

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<b>President</b> , CS Graduate Student Council <i>Virginia Tech</i>	2019-2020
<b>Vice President</b> , CS Graduate Student Council <i>Virginia Tech</i>	2018-2019
<b>Working Group Member</b> <i>CSSPLICE Programming Snapshot Data Working Group</i>	2018–present
<b>Reviewer</b> <i>SIGCSE Technical Symposium</i>	2018, 2019
<b>Treasurer/Cofounder</b> , CS Graduate Student Council <i>Virginia Tech</i>	2017-2018