

Keerti Banweer

School of Computer Science, University Of Oklahoma, Norman, Ok 73019

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Teaching Interests: Introduction to Programming - Java, C++ , and Python, Advanced Java, Data Structures and Algorithms, Software Engineering, Text Analytics, Data Mining, Machine Learning.

Research Interests: Computer Science Education, Programming, Code review, Debugging, Software Engineering

Education

University of Oklahoma , Ph.D. in Computer Science <i>Dissertation: Developing Code Reading Skills in Entry-Level Computer Science Courses</i>	July 2025
University of Oklahoma , M.S. in Data Science and Analytics	July 2017
Rajasthan Techincal University , B.Tech. in Electronics, Instrumentation and Control Engineering	June 2010

Teaching Experience

Instructor: Java for Programmers Graduate Teaching Assistant School of Computer Science, University of Oklahoma	Fall 2023 - present, Fall 2020 - Fall 2021, Fall 2018 – Spring 2019
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- Manage the whole course along with delivering Lecture and provide student support hours
- Organized the lecture content through Canvas
- Design and Grade Assignments and Exams

Instructor: Introduction to Programming Graduate Teaching Assistant School of Computer Science, University of Oklahoma	Spring 2024 - present. Fall 2019, Summer 2023
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- Manage the whole course along with delivering Lecture and provide student support hours
- Organized the lecture content through Canvas
- Design and Grade Assignments and Exams

Lab Instructor Graduate Teaching Assistant School of Computer Science, University of Oklahoma	Fall 2020 - Spring 2023, Spring 2018 - Spring 2019
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Course: Introduction to Programming

- Teach the lab for an entry-level programming class
- Grade the assignments
- Provide student support hours of an average of 3 hours per week

Graduate Teaching Assistant School of Computer Science, University of Oklahoma	Spring 2020
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Course: Text Analytics

- Deliver guest lecture and provide student support hours
- Organize and design assignments through Canvas
- Grade Assignments and Exams

Professional Experience

Graduate Research Assistant January 2017 - December 2017
School of Computer Science, University of Oklahoma

- Analyze the database management system of FAA (Federal Aviation Academy)
- Suggest meaningful inputs to transform existing FAA data into usable information for FAA to leverage the insights to make decisions and for effective management of Aviation safety.

Student software Developer September 2016 - December 2016
CCE-IT, University of Oklahoma

- Website design and development using Django framework ‘
- Write test cases to evaluate the web application

Technical Analyst December 2010 - September 2015
Infosys

- Develop and manage applications for a healthcare company.
- Worked on z/OS IBM Mainframe OS to develop and maintain applications with COBOL and JCL, and DB2 as the backend.
- Worked with Business Analysts to discuss and address existing and new issues

Honors and Awards

GCoE Graduate Student Travel Award Fall 2024
University of Oklahoma

CS Alumni Grad Fellowship Spring 2022
University of Oklahoma

Provost's Certificate of Distinction in Teaching Fall 2021 and Spring 2019
University of Oklahoma

Robberson Conference Presentation & Creative Exhibition Travel Grant Fall 2018
University of Oklahoma

Publications

WIP: Code Insight: Combining Code Reading and Debugging Practices for Active Learning in Entry-Level Computer Science Courses Fall 2024

Presented this work-in-progress paper at the FIE 2024 conference in Oct 2024.
Banweer, K. and Trytten, D.A., 2024, October. WIP: Code Insight: Combining Code Reading and Debugging Practices for Active Learning in Entry-Level Computer Science Courses. In 2024 IEEE Frontiers in Education Conference (FIE) (pp. 1-5). IEEE.

WIP: A Qualitative Study of Students' Code Review Practices in a Computer Science Program Fall 2024

Presented the poster for the work-in-progress research work at FIE 2024 conference in Oct 2024

Multi-stage Collaborative filtering for tweet geo-location Fall 2018

Banweer, K., Graham, A., Ripberger, J., Cesare, N., Nsoesie, E. and Grant, C., 2018, November. Multi-stage collaborative filtering for tweet geolocation. In Proceedings of the 2nd ACM SIGSPATIAL Workshop on Recommendations for Location-based Services and Social Networks (pp. 1-4).

Learner Database management at FAA Summer 2017

Presented a poster of our project on Learner database management at COE SOAR conference

Academic Service

Officer of Computer Science Graduate Student Association

Spring 2018 - Spring 2020

University of Oklahoma

Organize talks and workshops for CS graduate students

DataBite series at School of Computer Science

Fall 2018, Fall 2019, and
Spring 2020

University of Oklahoma

Planned and Organize a tutorial series on Big Data to provide an understanding of simple data analytics tools useful in different domains

Mentoring Students

Spring 2019 - Summer 2020

University of Oklahoma

Mentor students with research in Data analysis

Skills

Languages: Python, R, SQL, Java, JavaScript, HTML, CSS, C#, Matlab, C, C++ , Bash/Shell, PHP, COBOL, CICS, JCL, VBA, AMPL

Frameworks : Pandas, SciPy, NumPy, Scikit-learn, Matplotlib, Plotly, Django, BeautifulSoup, Gurobi, Unity, JQuery, Bootstrap, Android API, UWP API, D3.js, Git, OOP, Caret, doParallel, Gradle, JIRA, Jenkins, Cucumber, Selenium

Database : PostgreSQL, MongoDB, SQLite, MySQL, Oracle

Software : Jupyter Notebook, Tableau, MS Office, AnyLogic, Google Analytics, Windows, Linux, Mac, Visual Studio, Visual Studio code

Modelling : Linear Regression, KNN, K-Means, Decision Tree, Random Forest, SVM, PCA, Elastic Net, Ridge Regression, Lasso Regression, AdaBoost, Reinforcement Learning, Deep Learning, Neural Networks, Large Language Models

References

Dr. Deborah Trytten

Presidential Professor

School of Computer Science

University of Oklahoma, Norman, Ok 73019

Email: dtrytten@ou.edu

Dr. Christan Grant

Arnold and Lisa Goldberg Rising Star Associate Professor in Computer Science

Computer & Information Science & Engineering

University of Florida, Gainesville 32611

Email: christan@ufl.edu

Abinash Borah

Graduate Teaching Assistant

Department of Computer Science

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