

Dr. Hüseyin Ergin Ball State University, Indiana, USA

Linkedin: https://www.linkedin.com/in/huseyin-ergin/

How High Can We Fly: Raising Abstraction in Software Development

Abstract: The rise of no-code and low-code tools has become a significant trend, with many cloud platforms offering their own solutions and numerous companies entering the market with substantial financial backing. In this talk, I will provide insights into these tools, exploring their origins, current state, and impact on software development. I will clarify the terminology and position these tools within the software development ecosystem by highlighting their differences from other similar technologies and placing my research into context. With the help of generative AI, can these tools help us advance one more level in the software engineering abstraction ladder, eliminating the need for perfectly structured code based on strict grammar? Can we model our software by giving the correct prompts to the computer in everyday language? A significant part of this talk will focus on our current position in this revolutionary shift. Finally, I will briefly discuss other projects I am currently involved in.

Bio: Huseyin Ergin is an Associate Professor in the Computer Science Department at Ball State University in Muncie, Indiana. His research interests include computer science education, software engineering, and model-driven engineering. He earned his Ph.D. and M.Sc. degrees from the University of Alabama, along with an additional M.Sc. from Sabanci University in Turkey, and a B.Sc. from Yeditepe University in Turkey, all in computer science or engineering. With extensive industry experience, Huseyin has worked as a software developer in R&D departments, IT departments, startups, and manufacturing companies, gaining a comprehensive understanding of software development practices in various settings. He has participated in numerous programming, science, robotics, idea, startup, and entrepreneurship competitions/events. Currently, Huseyin collaborates actively with industry partners to research software engineering techniques and practices. He has secured over \$150,000 in grant funding for software engineering research from industry partners. In addition to his research, he teaches software engineering classes and supervises software projects for local community partners, including startups, non-profit organizations, university branches, and local companies.

Seminar Date: 22 July 2024, 19:00-20:00 Meeting Link: meet.google.com/amj-aure-bsc