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Associate Professor

Software Engineering, Software Testing, Regression Testing, Empirical Studies

Research Group: RISE (Research Innovation in Software Engineering); 4 Ph.D. Students and 1 MS student

Model-based Requirements Verification Final outcome No ONB Revised detection Requirements NL to CCM **ONB** S1 Translation Analysis S5 Causal Component Model (CCM) ONB detecti ONB NL Rea **Properties** refinement Detected ONB **Problems** ONB Property Builder

Regression Testing

- Cost-effective regression testing techniques considering testing context
- Techniques: Code metrics, history information, and data mining approaches
- Rigorous empirical evaluations using industrial applications and open source

Model-based Requirements Verification

- Natural language processing from NL requirements
- Build state transition models
- Detect off-nominal behaviors
- Targeted for embedded systems

