

# Software Engineering

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## Department Information

- **Department Chair:**  
Simone Ludwig, Ph.D.
- **Program Coordinator:**  
Saeed Salem, Ph.D.
- **Department Location:**  
258 QBB
- **Department Phone:**  
(701) 231-8562
- **Department Email:**  
gradinfo@cs.ndsu.edu
- **Department Web Site:**  
ndsu.edu/cs/ (<http://ndsu.edu/cs/>)
- **Application Deadline:**  
February 1 for fall admission; September 1 for spring admission\* No summer admission for any Software Engineering Program
- **Credential Offered:**  
Ph.D., M.S., M.S.E, Certificate
- **Test Requirement:**  
GRE - M.S. and Ph.D. applicants (waived for fall 2022 applicants)
- **English Proficiency Requirements:**  
TOEFL ibt 79; IELTS 6.5; Duolingo 105

### **Zahid Anwar, Ph.D.**

University of Illinois at Urbana-Champaign, 2008

Research Interests: Cybersecurity Policy and Law, Artificial Intelligence and Machine Learning

### **Anne Denton, Ph.D.**

University of Mainz, 1996

Research Interests: Data Mining, Bioinformatics, Scientific Informatics, Databases, Geospatial Data, Cloud Computing

### **Jun Kong, Ph.D.**

University of Texas, Dallas, 2005

Research Interests: Human Computer Interaction, Mobile Computing, Software Engineering

### **Pratap Kotala, Ph.D.**

North Dakota State University, 2015

Research Interests: Software Engineering

### **Juan (Jen) Li, Ph.D.**

University of British Columbia, 2008

Research Interests: Smart and Connected Health, Semantic Web Technologies, Internet of Things (IoT)

### **Lu Liu, Ph.D.**

University of Texas San Antonio, 2017

Research Interests: Bioinformatics, Data Mining, Machine Learning, Data Science

### **Simone Ludwig, Ph.D.**

Brunel University, 2004

Research Interests: Swarm Intelligence, Evolutionary Computation, Deep Neural Networks, Fuzzy Reasoning, Machine Learning

### **Kenneth Magel, Ph.D.**

Brown University, 1977

Research Interests: Software Engineering, Human-Computer Interfaces, Software Complexity, and Software Design

### **M. Zubair Malik, Ph.D.**

University of Texas at Austin, 2014

Research Interests: Program Analysis, Automated Program Repair, Secure Software Development, Software Verification-Validation and Testing, Software Systems (especially large scale Distributed Systems for Data science and Machine Learning), Formal Methods, Application of Artificial Intelligence in Program Analysis

**Oksana Myronovych, Ph.D.**

North Dakota State University, 2009

Research Interests: Software Engineering

**Saeed Salem, Ph.D.**

Rensselaer Polytechnic Institute, 2009

Research Interests: Bioinformatics, Machine Learning and Data Mining

**Jeremy Straub, Ph.D.**

University of North Dakota, 2015

Research Interests: Multi-tier Mission Architecture & Control, Autonomous Data Link Reduction, Autonomous Vehicle Control, Machine Vision, Super Resolution

**Vasant Ubhaya, Ph.D.**

University of California-Berkeley, 1971

Research Interests: Algorithm Analysis, Approximation and Optimization

**Changhui Yan, Ph.D.**

Iowa State University, 2005

Research Interests: Bioinformatics, Computational Biology, Genomics, Machine Learning, Data Mining, Big Data, Cloud Computing

## Affiliate Faculty

**Kendall Nygard, Ph.D.**

Virginia Polytechnic Institute and State University, 1978

Research Interests: Data Science, Optimization, Cybersecurity, Smart Grid, Sensor Networks, Agents, Simulation, Artificial Intelligence, Adaptive Systems, Swarm Intelligence

**Gursimran Walia, Ph.D.**

Mississippi State University, 2009

**Otto Borchert, Ph.D.**

North Dakota State University, 2015

Research Interests: Artificial Intelligence, Educational Games, STEM Learning