

Jennifer C. Cremer

Department of Computer & Information
Science & Engineering
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Education

Ph.D in Computer Science (Computer Graphics & Visualization)

University of Florida, 2023 (Expected)

B.S. in Digital Arts and Sciences

University of Florida, 2018

Teaching Experience

Instructor on record

2020 - Present

Course: CIS4930: Special Topics in CISE - Design Patterns in OOP

Dept. of Computer & Information Science & Engineering, Univ. of FL

- Original development of course content and material on key paradigms in programming and efficient design choices
- Instructed students on industry soft-skills including team dynamics and communication of ideas to an interdisciplinary audience
- Executed a smooth transition to online platform at the start of the covid-19 pandemic

Graduate Teaching Assistant

2018 - 2020

Dept. of Computer & Information Science & Engineering, Univ. of FL

Course: COP4600 - Operating Systems

2018 - 2020

- Assisted the professor with course management and student affairs
- Led team of peer mentors and teaching assistants in organization of discussion content
- Facilitated team grading of assignments according to unified rubrics
- Developed assignments and exam questions
- Led large-scale discussion sections covering review, and supplemental, materials
- Mentored students through office hours and one-on-one communication

Course: CIS4930 - Special Topics in CISE - Performant Programming in Python **2020**

Course: CAP4053 - Artificial Intelligence for Computer Games **2019**

- Assisted the professor in course organization and student affairs
- Mentored students through office hours and one-on-one communication.
- Developed original assignment specifications and materials
- Provided grades according to university standards

Course: COP3503 - Programming Fundamentals 2 in C++

2019 - 2020

- Taught lab sections covering review and supplemental materials
- Mentored students through office hours and one-on-one communication
- Proctored tests and provided grades according to university standards

Undergraduate Teaching Assistant

Dept. of Computer & Information Science & Engineering, Univ. of FL

Course: COP4600 - Operating Systems

2018

- Taught large-scale discussion sections covering review material
- Mentored students through office hours and one-on-one communication
- Worked as a team to develop original assignments and improve course organization
- Proctored tests and provided grades according to university standards

Course: COP3530 - Data Structures and Algorithms

2017

- Taught discussion sections covering supplemental material
- Mentored students through office hours and one-on-one communication
- Proctored tests and provided grades according to university standards

Research Experience

Graduate Student Researcher

2018- Present

Jörg Peters, SurfLab, University Of Florida

- Developing a VR platform for analysis, reconstruction, and exportation of CT and MRI into interactive models
- Managing correspondence with our collaborators at the Veterinary School and with the Colorectal Oncology Team at UF Health: Shands
- Lab coordinator

Undergraduate Researcher

2017 - 2018

Jörg Peters, SurfLab, University Of Florida

- Assisting in the development of a surgical simulation software including UI development and implementing user feedback
- Managing correspondence with our collaborators at the Veterinary School
- Developing a VR platform for 3D reconstruction of CT data

Service to Profession

Panelist, Prospective Ph.D Student Welcome Visit

2020-Present

Participated as a representative in Ph.D Student Panels organized by the department during the application season, answering questions by applicants about the department and student life

Academy Software Foundation: Diversity & Inclusion Working Group

2020-Present

Member, University Partner Contact for Univ. of FL.

Pilot launch of outreach webinar series initiative

Understudy to Japan Study Abroad Organization 2019-Present
Teaching Assistant consultant for pilot launch of CISE/Cross-Cultural Engineering Abroad program in Kyoto/Osaka, Japan

Student Consultant to Digital Arts and Science Program 2018-2019
Organization and course direction suggestions to present DAS Director (Joshua Fox)

Conferences

ACS Surgeons and Engineers 2021

Virtual

"From Scans & Model Collections to Interactive Surgical Simulation", Poster

Academic Surgical Congress 2020

Orlando, FL

"VascularVR", SurfLab Exhibitor

Mentoring & Advising

Advisor to Prospective Ph.D Students 2020 - Present

Dept. of Computer & Information Science & Engineering, Univ. of FL

- Providing research and planning guidance for 3 undergraduate students for how to prepare application packages for Ph.D. programs
- Connected students with teaching opportunities in the UF department
- Instructed students in graduate responsibilities including how to pick a research lab and getting involved in research, and knowing when graduate school is the right path

Operating Systems Team Lead 2018 - 2020

Dept. of Computer & Information Science & Engineering, Univ. of FL

- Served in a training capacity to new students (undergraduate and graduate students alike) on the course staff
- Trained the staff on the responsibilities and general approach to being both a TA and mentor
- Provided detailed instruction on how to conduct discussion sections
- Taught the staff innovative strategies to better educate others, including utilizing the Socratic Method in Office Hours
- Aided in the ground-up creation of grading rubrics
- Coached graduate students to serve as mentors to the students under their care from a holistic standpoint in terms of both student major as well as each student's unique perspective

Computer Science TA/PM Mentor 2021 - Present

Dept. of Computer & Information Science & Engineering, Univ. of FL

- Guided Operating Systems course staff in mentoring and grading techniques to aid the transition of a new professor leading the course.

Student Researcher Mentor

2018 - Present

SurfLab, Dept. of Computer & Information Science & Engineering, Univ. of FL

- Advisor to three undergraduate Senior Projects
- Project Lead and Mentor to seven undergraduates during a one to four year span
- Provided guidance, oversight, and trained mentees on how to read research papers, organize a project, present a research idea to the group, and develop mature scientific practices

Summer Science Mentor

2017, 2019

SSTP, University Of Florida, Gainesville , FL

- Introduced high school students to the environment and experience of working in a university research lab.
- Outlined project milestones and developed a comprehensive timeline for tasks.
- Provided guidance in conducting background research and how to frame accomplishments into an organized presentation.

Grants & Awards

Research in Robotic Technology Grant - Research Foundation of the ASCRS 2021

CISE Department Nominee, Outstanding Graduate Teaching Assistant Award 2020
University of Florida

Student Participation Award, MICCAI 2020
Subsidized registration and attendance fees for MICCAI 2020

NSF GRFP Honorable Mention, Computer Graphics and Visualization 2020

Graduate Teaching Assistantship for Doctoral Program 2018
Dept. of CISE, University of Florida

Technical Skills

Programming Languages:

Matlab, C++, Java, C#, Python, JavaScript

Design/Modeling/Simulation Tools:

Unity, Blender, Maya, AutoCAD, Rhino3D, SoFA, SteamVR

Intercommunication:

Mediation, Conflict Resolution, Project Organization