Computing Sciences Colloquia – Fall 2024 – Spring 2025

Department of Computing Sciences, University of Scranton
P. M. Jackowitz, Coordinator

Last Modified Monday March 10, 2025

	Spring 2025, dates subject to change
Week of	**Friday 3:00 – 4:15 PM**
Jan 20	Jan 24 – Introductory Meeting
Jan 27	Jan 31 - LSC 133 reserved
Feb 3	Feb 7- LSC 133 reserved
Feb 10	Feb 14 – LSC 133 reserved
Feb 17	Feb 21- LSC 133 Virtual and Augmented Reality – Dr. Frank Klassner '88
Feb 24	Feb 28 - LSC 133, ACM Distinguished Speaker Security in 5G Networks - Challenges and Opportunities – Dr. Ashutosh Dutta
Mar 3	Mar 7– LSC 133 reserved
Mar 10	Mar 14 – Last Day of Classes before Spring Break
Mar 17	Mar 21 - Spring Break
Mar 24	Mar 28 – BRN 228 Managing Analytic Data Change: A Case Study from LinkedIn – Dr. Paul Ogilvie
Mar 31	Apr 4 – LSC 133
Apr 7	Apr 11 – LSC 133 What's Next, Jeff? - Jeff Teschke '00
Apr 14	Apr 18 – Easter Break
Apr 21	Apr 25 – LSC 133 reserved
Apr 28	May 2 – LSC 133, Student Projects Panel/Fair, *Current Students (TBD)*
May 5	May 9 – Last Day of Classes LSC 133 reserved
May 12	May 16 – Last Day of Exams and Semester

	Fall 2024
Week of	**Friday 3:00 – 4:15 PM**
Aug 26	**Aug 30 - Introductory Meeting** *(LSC 133 reserved)*
Sept 2	
Sept 9	**Sept 13- Introduction to Docker & Containerization, Joseph Gnall '18** *(BRN 228 reserved)*
Sept 16	
Sept 23	
Sept 30	**Oct 4- An Insiders Tour of the IBM Z & LinuxONE Test Facility,** **Pasquale "PJ" Catalano - IBM Z & LinuxONE Test Architect** *(LSC 133 reserved)*
Oct 7	
Oct 14	**Oct 18 – Web Development Experiences, Joseph Spinosa '19** *(LSC 133 reserved)*
Oct 21	
Oct 28	
Nov 4	
Nov 11	**Nov 15 - Working with Legacy Code, Craig Lind '18** *(LSC 133 reserved)*
Nov 18	
Nov 25	*Thanksgiving break*
Dec 2	**Dec 6- Student Internships Panel/Fair** *, Current Students* *(LSC 133 reserved)*
Dec 9	*Final Exams*

Sep-13-2024	**Introduction to Docker & Containerization**
	Joseph Gnall, '18
	ABSTRACT:

	In today's rapidly evolving tech landscape, the need for scalable and efficient software development practices has never been greater. This presentation provides a comprehensive introduction to Docker and containerization, two pivotal technologies driving modern software development and deployment. Attendees will gain insights into Docker's architecture, its core components such as images, containers, and Dockerfiles, and practical use cases illustrating its impact on development workflows. By the end of the session, participants will understand the advantages of Docker and be equipped with foundational knowledge to start leveraging containers in their own projects.
	BIOGRAPHY: Joseph Gnall ('18) earned his BS in Computer Science and MS in Software Engineering at the University of Scranton. Since graduation, he has worked for multiple government contractors in the DMV (DC, Maryland, Virginia) area. He has gained substantial experience in software development and cloud computing. He is currently working as a Lead Platform Engineer at Booz Allen Hamilton, Inc where he is the project lead of a software factory that primarily supports work for United States Defense Contracts.
Oct-04-2024	**<u>An Insiders Tour of the IBM Z & LinuxONE Test Facility</u>**
	Pasquale "PJ" Catalano - IBM Z & LinuxONE Test Architect
	ABSTRACT: Join PJ Catalano, the IBM Z & LinuxONE Test Architect, as he gives a virtual tour of the IBM Z and LinuxONE Test Facility located on Poughkeepsie, NY. This 80,000 sq ft data center is home to 200 mainframes used to test new hardware, firmware, and software, to ensure that IBM's systems maintain their world class quality and reliability standards.
	BIOGRAPHY: Pasquale "PJ" Catalano is the IBM Z & LinuxONE Test Architect, based out of Poughkeepsie, NY. As a Senior Technical Staff Member and Master Inventor at IBM, he has over 20 years of quality assurance experience in the mainframe industry. PJ's passion for everything mainframes has earned him the title of "Top Mainframe Influencer of 2024" from Planet Mainframe.
Oct-18-2024	**<u>Web Development Experiences</u>**
	Joseph Spinosa, '19
	ABSTRACT: The realm of web development is a rapidly evolving one with constant iterative improvements. It can be hard to keep up with all the frameworks and 3rd party packages that are commonly used. In this presentation, I want to go over the four biggest libraries I used at Yoga International as a Web Developer. Topics covered will be React, Typescript, Cypress, and GraphQL. We'll go over some of the major features of each and how they are used together. Additionally, I'll share some of my experiences working on a dev team for the first time and adapting to the team's conventions which

	bolstered the integrity of the codebase. The aim is to provide attendees with information about web development that I wish I'd known before going into it.
	BIOGRAPHY: Joseph Spinosa ('19) earned his BS in Computer Science and MS in Software Engineering at the University of Scranton. Shortly after graduating, he began working for a local e-commerce company, Yoga International. In his role as a Web Developer there for ~4 years, he went from being a total beginner to an experienced software developer. He worked on both the company website and mobile app for iOS/Android. He currently works at the University of Scranton in a similar role.
Nov-15-2024	**Working with Legacy Code**
	Craig Lind '18
	ABSTRACT: One of the most important parts of being a developer is learning the ability to work on other peoples' code. This remains the case even well after a developer might have put the code in place. This presentation on working with legacy code will supply information and strategies on how to identify working patterns when it comes to others' work. By the end of the presentation, attendees should feel more comfortable working with legacy code and be able to better identify the course of actions upon being tasked with updates, modifications, or new features into old codebases.
	BIOGRAPHY: Craig Lind (B.S. '17, M.S. '18) earned his Bachelors and Master's degree from the University of Scranton. After graduation, Craig moved down to DC to work for government contractors and for a few years at Ford Motor Company. He is currently working at a government contractor, Ridgeline International, as a backend Software Engineer where daily tasks include dealing with older code that has existed for years.
Dec-06-2024	**Student Internships etc. Panel/Fair**
	Current Students - TBD
	ABSTRACT: Current students will each offer brief presentations on their recent internship, and other such, experiences. Afterwards, they will serve as a panel to answer questions and to discuss their experiences.
Feb-21-2025	**Virtual and Augmented Reality**
	Dr. Frank Klassner '88
	ABSTRACT:

	The fields of Virtual Reality (VR) and Augmented Reality (AR) have decades-long R&D track records that have explored many hardware and software implementations for their goals. The fields have been perennially promoted as potentially disruptive for industry, research, education, entertainment, and society. Dr. Klassner has led the Villanova Center of Excellence in Enterprise Technology (CEET) for 18 years. The Center has undertaken several VR and AR projects in that time. This talk will survey the history of these fields and discuss the impacts of AR/VR projects that have been conducted at the CEET VR CAVE facility in research and education. It will conclude with future challenges and directions for the fields.
	BIOGRAPHY: BS Computer Science 1988 University of Scranton BS Electronics Engineering 1988 University of Scranton MS Computer Science 1990 University of Massachusetts/Amherst PhD Computer Science 1996 University of Massachusetts/Amherst Frank is a Professor at Villanova University. He is technical advisor for the Computer Science Vatican Internship program at Villanova and Director of the school's Center of Excellence in Enterprise Technology (CEET). While leading CEET he has obtained $5 million in research funding for projects in robotics, virtual reality, and augmented reality. These projects include developing software to support Lego Mindstorms in college CS curricula, simulating Lego robots with Jet Propulsion Labs' ROAMS software, constructing and managing a VR CAVE system for education and research, and developing an augmented reality system for teaching students about hydrological processes.
Feb-28-2025	**ACM Distinguished Speaker** **<u>Security in 5G Networks - Challenges and Opportunities</u>**
	Dr. Ashutosh Dutta, Senior Scientist and 5G Chief Strategist at the Johns Hopkins University Applied Physics Laboratory (JHU/APL)
	ABSTRACT: Software Defined Networking (SDN) and Network Function Virtualization (NFV) are the key pillars of future networks, including 5G and beyond that promise to support emerging applications such as enhanced mobile broadband, ultra-low latency, massive sensing type applications while providing the resiliency in the network. This talk will address evolution of cellular technologies towards 5G but will largely focus on various security challenges and opportunities introduced by SDN/NFV and 5G networks such as Hypervisor, Virtual Network Functions (VNFs), SDN controller, orchestrator, network slicing, cloud RAN, edge cloud, and security function virtualization.
	BIOGRAPHY: Ashutosh Dutta is currently senior scientist and 5G Chief Strategist at the Johns Hopkins University Applied Physics Laboratory (JHU/APL). He has more than 90 conference and journal publications, three book chapters, and 31 issued patents. Ashutosh is co-author of the book, titled, “Mobility Protocols and Handover Optimization: Design, Evaluation and Application” published by IEEE and John & Wiley.

	As a Technical Leader in 5G and security, Ashutosh has been serving as the founding Co-Chair for the IEEE Future Networks Initiative that focuses on 5G standardization, education, publications, testbed, and roadmap activities. He also served as IEEE Communications Society's Distinguished Lecturer for 2017-2020. He co-founded the IEEE STEM conference (ISEC) and helped to implement EPICS (Engineering Projects in Community Service) projects in several high schools.
Mar-28-2025	**Managing Analytic Data Change: A Case Study from LinkedIn**
	Dr. Paul Ogilvie
	ABSTRACT: Social media companies rely on accurate usage tracking across their sites and applications to report metrics, make product decisions, and train Machine Learning models. I present a case study from LinkedIn, where LinkedIn redesigned their data analytics ecosystem during a major product rewrite. I will cover the issues with the prior data ecosystem, the challenges of building a new ecosystem concurrently with new product development. I will describe LinkedIn's approach using a data virtualization layer to unify access to legacy data and new data. I will discuss culture and process changes that LinkedIn implemented to improve ongoing data quality. Finally, I will summarize some lessons learned and principles for data management.
	BIOGRAPHY: Paul Ogilvie, Ph.D., is a software professional, having worked in industry for over a decade. Paul's team at LinkedIn was brought in as borrowed help for several months to implement the first data views in the new virtualization layer discussed in the talk. They piloted the migration and provided a runbook for other teams to follow as they adopted the new technology. Paul studied Computer Science and Mathematics at the University of Massachusetts at Amherst. He completed his Ph.D. in Language and Information Technologies from the School of Computer Science at Carnegie Mellon University in 2010. From 2010 to 2017, Paul worked as a software engineer and manager building Machine Learning infrastructure at LinkedIn. After LinkedIn, Paul joined Databricks as an Engineering Director of Machine Learning. Paul currently is enjoying a lighter workload, serving as an advisor and consultant. He lives with his family in Dunmore and enjoys woodworking in his spare time.
Apr-11-2025	**What's Next, Jeff?**
	Jeff Teschke '00
	ABSTRACT: Jeff is an accidental entrepreneur, having many "failures" before ultimately realizing the American dream of building and selling his tech company in 2022. His story is one of creation, persistence, and patience. Come along as he shares the inside story and lessons learned (the hard way!) on his journey to realizing success and perspective on what matters most. Follow along and see what's next for Jeff here: whatsnextjeff.com

	Jeff is a proud 2000 graduate of University of Scranton.
	BIOGRAPHY: My name is Jeff Teschke. I've worked at big companies, small companies, and started my own companies. Most failed, until one didn't. Forge3, a company I bootstrapped from nothing, quickly became the insurance industry's leading website and digital marketing platform. It was acquired in July 2022. 🎉 My life changed overnight. Work is now optional. Money is abundant. I can spend my time doing and thinking about whatever I'd like. Sounds pretty great, right? It is, mostly. But I enjoy the sport of business way too much to sail (or fly) off into the sunset. I'm not done. There's more for me to do. I don't know exactly what to do or how I'll do it. At least not yet. And that's what my website, WhatsNextJeff.com, is about. It's a journal of my ideas, thoughts, and struggles. The ups and (mostly) downs that it takes to build something from nothing. It's also a glimpse into my personal life. Private airplanes, boats, travel, and doing my best to live in the moment while helping others along the way. If you're only interested in the eventual "success story" on the cover of a magazine, this isn't the place for you. But if you want to come along as I figure out what's next, I'd love to have you along for the ride. Progress is perfection. Let's get going.
May-02-2025	**<u>Student Projects etc. Panel/Fair</u>**
	Current Students (TBD)
	ABSTRACT: Current students will each offer brief presentations on their recent projects, such as Capstone and Thesis projects. Afterwards, they will serve as a panel to answer questions and to discuss their experiences.

Upcoming (Fall 2025)

Fall 2025	**A Day in the Life of a (Mainframe) Software Developer**
	Chris Filachek '96
	ABSTRACT: IBM Z, more commonly known as “the mainframe”, continues to be a critical part of the world’s computing infrastructure that makes modern life possible, powering banking, retail, travel, and other industries. Often thought of as being completely different than other platforms, today’s mainframe has evolved to take advantage of many popular technologies. Today’s mainframe fits in standard data center racks, connects to other systems using standard protocols, and runs many of today’s modern languages. Let’s take a look at what it’s like to be a software developer on the mainframe. While the mainframe is different when it matters, you might find there’s more similarities to other platforms that you might expect.
	BIOGRAPHY: Shortly before starting college in 1992, technology pundits predicted that the last mainframe would be turned off in 1996, which is the same year Chris graduated from the University of Scranton. As a result, Chris never imagined working for IBM or on the mainframe. However, through a series of chance meetings and a constant stream of challenging and interesting work, his first and only job after college was (and still is) working on z/TPF, IBM’s high-volume, real-time transaction processing operating system and middleware for the mainframe. Mainframes are here for the long haul and so is Chris, who is currently a senior database and storage architect for z/TPF and is responsible for storage (disk), file systems, database managers, and other areas across z/TPF.