Program

Keynote

How We Make Technical Knowledge
Jason Swarts (NC State University – Professor & Associate Head of the Department of English)

This presentation will examine the field and practice of technical communication as a methodology of social and technical knowledge creation. Drawing on a brief history of technical communication, I aim to discuss how methods of technical communication have been influenced by their ancestry in science and engineering fields and how the application and refinement of those methods position technical communicators as non-situated creators of social and technical knowledge. By re-orienting ourselves to the production of social and technical knowledge as a pragmatic process of social construction, I argue that we can arrive at a way to critically examine our everyday practices and see whether they account for the range of knowledge, experiences, and identities that characterize contemporary situations calling for the application of technical knowledge.

Speedtalks
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Writing Practices of Medical-Technical Communicators in Open Source Software
Romanda Brown (NC State University – Master's Student, Red Hat – Technical Writer)

OpenEMR and OpenEHR are two open-source software (OSS) programs for electronic health records (EHR) management. They have successfully provided management resources to healthcare providers around the world, particularly in impoverished and/or rural areas. Little is known about the process(es) used for technical documentation in these communities, and this knowledge could aid the development of other medical OSS projects, to the benefit of healthcare providers with similar patient demographics and locations. A netnographic study was conducted within the aforementioned development communities to identify the writing strategies of technical communicators within each community as they work together to create documentation for their respective products. Forum posts and internal documents from each community were analyzed to identify common practices and ideas, as well as to understand the role of technical communicators within the communities.

SpeedTalk: Accessibility for ID
*C*hris Dawson (IBM – Information developer for Cloud)

Most of us have heard about accessibility lawsuits and the Americans with Disabilities Act, but it is not always apparent how accessibility compliance applies to technical documentation on the Internet. We will touch on the most common sources of accessibility issues for HTML documentation. With the awareness of these areas, you can make your documentation more accessible to people with disabilities.

The Tools We Use to Communicate: A 40–year Retrospective and a Look Ahead
Stan Dicks (NC State University – Emeritus Associate Professor)

In the last 40 years the tools technical communicators use have gone from Eagle no. 2 pencils to sophisticated information management systems. This talk will discuss that progression, including the several disruptive technological developments that have most strikingly affected the discipline. After discussing those developments we will close by examining current practice and offering some ideas about future technological and methodical changes that technical communicators will enjoy.

Job Search 2.0 in an Algorithmic World: How to Stand Out in AI-augmented Pre-hire Assessment
Huiling Ding (NC State University – Associate Professor)

The landscape of job searches has been profoundly changed by the increasing use of algorithmic technologies to screen applicants for industry positions. With the use of robo-screeners such as RChili and ZipRecruiter, job applicants now should think about their resumes as the tool that helps them to survive algorithmic screening and reach the human screeners, not one that either gets them interviews or job offers. My analysis reveals the use of resume parsing, semantic search/matching, and resume profiling as three procedures used by AI-augmented technologies to quickly choose strong, qualified candidates out of an increasingly large pool of applicants. To write for such technologies, candidates must know how to use job ad analysis to produce core skills required by certain job types before employing resume keyword optimization to help their resumes stand out.

Meanwhile, the first rounds of job interviews are now being automated by image recognition algorithms used by video interview companies such as HireVue. Promising to "re-engineer the hiring funnel," HireVue claims to help enhance diversity, reduce costs, and increase quality with its structured interview technologies. In addition, HireView uses games as pre-hire assessments tools to evaluate multiple things ranging from emotion intelligence, communication skills, work styles, and fluid IQ to cognitive ability and personality.

What impacts do such algorithmic tools exert on job searches and how can students and professionals be prepared to look for jobs in a market mediated by automation technologies? This presentation will provide some preliminary answers to these important questions.

Designing Curriculum for a "Summer Workshop in TechComm" in India
Manasi Gandhi (NC State University – Master's Student)

Technical communication has been steadily rising in India over the past few decades. However, the growth in the number of technical communication jobs hasn't coincided with a corresponding university-level program. Technical communication education in India remains relatively restricted as

formal in-country academic programs are generally limited to workshops. Though there exist some private institutions which provide courses in technical communication, their curriculum is mostly restricted to the professional tools of production rather than a broader outlook in education. In the constantly emerging and changing professional field of technical communication with increased instances of distributed teams across the globe, coupled with diverse teams on-site, it also becomes necessary that we address the issues of internationalism and transculturalism in our field of work. I design a curriculum to address this gap. The purpose of this curriculum is to develop the instructional syllabus for a four-week summer workshop for prospective students and professionals in technical communication at a university in India in the context of the theoretical framework of cosmopolitanism, in terms of access to quality formal professional education.

Untangling Invisible Knots: UX in Voice Technology Products
Jessica Kainu (Kroger – UX Designer)

The user experience of a voice product is inherently difficult for both the user and the designer. It's invisible, it's abstract, and it's a new platform. For the user, voice can be overwhelming if too much information is presented. It takes a lot of mental power to keep information organized without a visual interface. On top of remembering information, the user needs to stay engaged. How do they keep from being distracted?

As a designer working on an abstract product, it can quickly become difficult to keep an understanding of how features are implemented from a technical and experience point of view. How do you discuss a voice product or design new features as a team when they're invisible? In this case study, we will cover designing a voice persona, how to keep a voice product organized, prototyping and testing, and how this will lead to a great product for your users.

Collocation Networks: Data Visualization Using a Corpus Analysis Tool
Yeqing Kong (NC State University – Doctoral Student)

Collocation, as a concept in corpus linguistics, represents the co-occurrence of words in texts. This talk discusses the notion of collocation graphs and collocation networks, which show the association between words in language and discourse. In addition to the numerical information about the collocational relationship between two words, we can also generate a graph representing the visual connections between different words. In this talk, I will introduce a new-generation corpus analysis tool, #LancsBox, developed by corpus linguists at Lancaster University (Brezina et al. 2015), which "automatically identifies collocations and builds collocation networks on the fly" (p. 61). As a powerful interpretative tool, #LancsBox can be used in a range of discourse studies and social research to visualize the complex linguistic relationships between language data.

The Top 5 Myths About UX Writers
Alex Heath (Bank of America – SVP, Editor-in-Chief)

As companies grow and roles evolve to meet the demands of digital, we're seeing a higher demand for more niche-specific skillsets, like UX writing. UX writers play a critical role in the creation and development of digital products. Maybe you know a UX writer, are on your way to becoming one, or already are one. There are many myths about what a UX writer actually is or does. This talk will debunk the five most common myths UX writers face in today's industry and prove why UX writers are becoming increasingly more valuable.

10 Lessons in 30 Years
Diana Levey (SAS – Senior Marketing Director)

In a program like NC State's, you'll learn everything you need to be successful at a job as a technical writer. But there are other skills that aren't taught in school... skills and life lessons that are learned on the job. These are the things Diana Levey wishes she knew 30 years ago when she was starting out in communications.

Learning DITA on Your Own
Christina Mayr (Epic Games – Sr. Technical Writer)

Technical writers seeking work may find their options limited due to no knowledge of DITA. This talk will provide free and low-cost resources for learning DITA at home, on your own, without spending thousands in formal training. As Christina is mostly self-taught in DITA, she will also share some tips and resources that made learning easier.

Information Architecture for Technical Communicators: An Introduction
Douglas Walls (NC State University – Assistant Professor)

Technical communication professionals do more than produce content. They are a hub of information flows between organizations, departments, teams, solutions, and users. Information Architecture (IA) is the structural design of shared information environments and is a natural pairing for the tasks that technical communication professionals do. This presentation will introduce IA as both the art and science of shaping information environments and experiences to support usability, findability, and knowledge production. The talk details what IA is as well as some of the concepts and deliverables that information architects produce.

Language of Defense: Rhetorical Concepts and Implications
Summer Walls (NC State University – Master's Student)

The growth and importance of national defense spending and the concurrent development of science and technologies is inescapable and time sensitive. We can readily see how the news media speaks about defense contractors and their technologies, but how does the defense industry speak about itself? This talk will present the quantitative findings and rhetorical implications of a study on defense contractors' online presence (tweets and video) contrasted with government documentation. The primary goal of the research is to discover how identity and communication about technology influence each other reciprocally through the lens of technical communication. The study's findings imply that the defense field (1) uses a saturation of patriotism and (2) implements visual rhetoric as a self-referential "terministic screen" through which to engage stakeholders and integrate corporate image with technology.

Investigation of an Online Knowledge Network: A Computational Rhetorical Analysis of Project Management Stack Exchange
Chenxing Xie (NC State University – Master's Student)

With the rapidly changing landscape of industry, project management grows to become an indispensable component. The mass collaboration within the field of project management brings

opportunities as well as challenges. This study explored the rhetorical strategies, dynamics, and issues of the online community of practice (CoP) of project managers. I built a corpus based on the well-known online knowledge network platform Project Management Stack Exchange with a web crawling tool, webscraper.io, and a data scrubbing tool, Lexos. Aiming to conduct the topic modeling analysis, I used a Latent Dirichlet allocation (LDA) based analytic tool and a t-Distributed Stochastic Neighbor Embedding (t–SNE) based visualization tool implemented with Python 3.6 in Jupyter Notebook to analyze and characterize the corpus. I found that teamwork, product content, and technology were the major topics in the CoP of project managers. The salient terms in the topic of product content problems revealed the user-centered tendency. The results shed light on project managers and scholars in technical communication. Project managers should engage in knowledge sharing within the CoP, since the CoP of project managers is a vigorous community for mass collaboration. Meanwhile, scholars in technical communication are encouraged to investigate the rhetorical strategies that improve the efficiency of knowledge sharing in the online CoP of project managers.

Workshops
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Enhancing Your CLI Text to Improve the Developer Experience
Art Berger (IBM – Technical Writer)

The command line interface (CLI) is a common tool that your developer audience can use to interact with your software product's API, as well as automate tasks through scripts. As technical writers, you can improve the developer experience (DX) of your CLI by focusing on the structure of commands; terms used for commands, flags, and values; help text with model examples; and useful error messages. In this workshop, you'll get a brief introduction to what CLI DX considerations you can focus on, some insight into how one tech writing team has approached these challenges, and then a hands-on activity to craft useful error messages.

Your Future as a Technical Communicator: How to Add to your Skills, Grow your Career, and Make Yourself Indispensable
Marsha Blackburn (RTI International – Research IT Technical Writer, Editor) and Erin Friday (RTI International – Research IT Documentation Specialist)

Employment is certainly preferred over the inverse, but staying flexible and accepting new tasks in addition to your regular technical communication work can help you grow your skills and career as well. Throughout our careers, we've found that taking the initiative, being a team player, and volunteering for and accepting new and additional tasks will help you improve your documentation, stay relevant in the company, get promoted, and directly ensure you remain employed.

Because technical communicators have so many transferable skills (excellent verbal and written communication skills, understanding of the user experience, attention to detail, etc.), it's logical that managers would seek us out for additional tasks, such as:

- Gathering requirements or testing software
- Leading projects as Project Managers and Scrum Masters
- Managing Web content

- Writing standard operating procedures (SOPs)
- Working the help desk
- Training users or managing personnel
- Editing all user communications, including emails and marketing materials

In this session, you will learn how to do the following using your existing set of skills:

- Become indispensable at your company so you can stay employed and get promoted.
- Grow your skills and career.
- Break into other fields, such as project management, training, testing, requirements, and personnel management.

Teaming Up with Your Development Team to Create Embedded Assistance
Anni Bond (Red Hat – Technical Writer II)

Anni will show attendees the different kinds of embedded assistance, going through writing a few, and then talk about how to get involved with development teams to make it happen, working through having attendees contribute to the creation of example-embedded assistance and why they wrote it the way they did.

Intro to Chatbots and Conversation Design
Beatrice Dlesk (Program Manager, Conversation Designer) and Willamina O'Keeffe (NC State University – Master's Student)

Chatbots are becoming more and more present as a contact channel for everyday users. In order to build a successful chatbot interaction that is not only enjoyable for the user, but also achieves their primary intent, you need a defined process and an understanding of your user and their personality. In this workshop, we will walk you through the process of building a chatbot start to finish, including a product that you will be able to take with you (laptops required!), as well as covering the basics of conversational interaction design.

Content Strategy 101: What Every Technical Communicator Should Know
Guiseppe Getto (East Carolina University – Assistant Professor, Content Garden, Inc. – President)

Content strategy is fast becoming one of the most valuable collection of skills for modern day technical communicators across industries. The ability to assess, manage, produce, and govern usable, useful content across technologies and media is now essential for anyone developing technical content. Content management systems, analytics tools, and publishing platforms are becoming everyday tools of technical communicators. In this workshop, you will learn some of the essential best practices of content strategy, including:

- How to conduct a content audit
- How to measure SEO
- How to publish content across channels
- How to manage content over the long-term
- How to collaborate across teams and specializations

This will be a hands-on workshop where participants are able to set initial goals, create a sample plan, and play with some of the tools common to content strategy.

Creating a Digital Marketing Strategy that Works: Audience, Ethics, & Organization
Missy F. Hannah (SAS Institute – Digital Marketing Specialist)

This workshop will offer a process for technical communication to create a digital marketing strategy for an organization or their own brand. First, we will work over what digital marketing is and what technical communication literature discusses around marketing campaigns. Then, we will discuss the ways ethics from various parts of technical communication play when creating marketing campaigns, especially on how we can stay ethical in the correct marketing environment. Next, attendees will be guided through the process of digital marketing strategy organization: first, they will work on audience discovery manually and automatically; second, they will design a year-long marketing strategy for the campaign of their choice; finally, they will look at the overall mapping of a digital marketing strategy in the overview of the company. This workshop hopes to have technical communicators engage with everyday practices of technical marketing communication industry professionals.

Building Chatbots and the Rhetorics of AI
Nupoor Ranade (NC State University – Doctoral Student)

Although the development of chatbots has come a long way as we model them for functioning as more than an information tool that can help end users resolve problems, it's time we think about how bots can be implemented while also making them human-like – not just in terms of efficiency, but also rhetorical considerations. Chatbots are programmed to analyze problems, respond to situations, and come up with solutions. With their conversational abilities, users consider bots to be more than just an algorithm. Therefore, we need to consider factors that humanize chatbots. In this workshop I will cover user experience, disability rhetorics, and ethical considerations for implementing chatbots, and I will demonstrate the implementation process. Participants will design and build their own chatbots and test them for usability and accessibility.

Developing a Bright Idea: From Concept to Creation
LeAndra Spicer (Bank of America – Content Strategist, Experience Design) and Kelly Woodfin (Bank of America – Senior Content Strategist)

This workshop will focus on how to move an idea from the beginning stages of development to the end of a project. We'll talk a little about content philosophy (it's not just copy!) and how to engage stakeholders before walking the group through a co-creation exercise. Participants will leave ready to take on their next big idea.

Taking Action: How Feminist Methodologies Inform the Social Justice Turn in TPC
Melissa Stone (NC State University – Doctoral Student)

This workshop discusses the social justice turn in technical and professional writing (TPC) and the ways in which this turn is informed by feminist methodologies. Feminism, which is understood in this context as the advocacy for gender equality, serves as the cornerstone for this workshop. Additionally, in line with Petersen & Walton (2018), the social justice turn in TPC is understood as focusing on critical work that does not center on analysis alone, but rather on incorporating and privileging action. Drawing on scholars in the TPC field who are practicing these methodologies in both industry and academia, we will

discuss and begin to answer questions such as: What is the social justice turn in TPC? Why does the social justice turn in TPC matter? How do feminist methodologies inform the social justice turn in TPC? How can we take feminist action in TPC? Why should we take feminist action in TPC?

To encourage discussions surrounding these questions, this workshop will be conducted in a three-phase process. First, participants will briefly learn about how feminist methodologies can inform the social justice turn in TPC. Next, participants will engage in a group activity where they will discuss topics in TPC that might benefit from the intervention of feminist methodologies. Finally, participants will share in an open discussion their experiences with and ideas for taking feminist action in TPC oriented-work. Ultimately, this workshop has the goal of encouraging those who are interested in TPC to consider and invoke feminist methods, approaches, and practices in academic and industry-based careers.

Accessibility and Testing at SAS
Tyler Williamson (SAS Institute – Test Engineer)

An overview of how accessibility is treated at SAS, as well as some of the things I look for when testing an application and some of the most basic concepts of accessibility in user interface design. Accessibility is all about making something equally useful and delightful for all users despite disabilities. We work to ensure that users of our software can continue to perform meaningful and productive work no matter their needs. In addition to these specific processes at SAS, we'll also discuss some of the fundamental concepts of accessibility in software.

Panels

Being Cognizant of Technical Issues: The Impact of Emerging Technologies
Hosted by Kelia Ray (NC State University – Master's student)

The goal of this panel session is to amass the wealth of practical knowledge conveyed by our specialist panel to create awareness about the issues and possible solutions associated with emerging technologies impacting the field of technical communication. The session will include one predetermined question addressed to each panelist and two open questions from the audience, as time permits, centered around our "diversified" theme.

Panelists include:
- Brandy Byrd (IBM Web Sphere Application Server – Information Development Team Lead)
- Ralph Hudson (Novo Nordisk – Sr. Technical Writer)
- Craig McKerlie (Raytheon Technologies – Cyber Security Technical Writer)
- Jennifer Willard (State of North Carolina – Sr. Technical Writer)

TriUXPA User Experience Panel
Hosted by Willamina O'Keeffe (NC State University – Master's student)

Interested in learning more about user experience (UX)? Curious how people got started in the field? Want to know more about the Triangle User Experience Professionals Association (TriUXPA)? Bring your questions to this panel discussion featuring four people who currently work in a variety of UX positions in different fields. The panelists will share their UX experiences and answer audience questions.

Panelists include:
- Ashley Katz (Lenovo – User Experience Designer)
- Sabrina Lonigro (Agilent Technologies – UI/UX Design Lead)
- Susan Tacker (Oracle + Bronto – Manager, Technical Communication and Courseware)
- Shane Williams (Lenovo – Project Manager)