CREATIVE STATEMENT

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Perhaps it's a good thing I don't read *People* magazine. There have been instances when my lack of Hollywood celebrity knowledge has helped my overarching creative goal at UNC to create media technologies that apply not only to the media industry, but to solve real-world problems for the average person.

I was "that guy" in a tux standing in front of a lit-up display at *The Washington Post's* White House Correspondents' Dinner pre-party. She was a beautiful woman in a gown who was curious enough to stop and demo my non-touch gesture interface of the U.S. Capitol dome renovation, pinching and turning her hands to control and zoom within the 3-D, 360-degree model.

"Wow," she said. "What else can you do with this?"

"Imagine you're in your house, brushing your teeth or entering a room, and you just have to swipe your hand to move through images, news or information," I said.

"Could I use this in my kitchen?" she countered.

"Yes!" I said, thinking quickly of an application. "We could set a screen directly into your countertop and you could cook without getting flour or fingerprints on your screen."

"We're building a house...do you have a card?" she answered excitedly as her husband walked up with drinks.

Perhaps I hadn't recognized Candice Crawford Romo as my wife would have been able to do. But identifying her husband Tony only took a one-second glance, no business card necessary. I had just helped solve a real problem for not-your-average person that could translate to an application for families across the country, even if your last name isn't Romo.

Solving problems with technical solutions has always been a driving force for my work, even when I served as the Editor of Innovations and then Editor of Video for *The Washington Post*. The map-and-timeline interface we

dubbed "TimeSpace" solved the paper's endeavor to visually display information in a way that could be consumed serendipitously, making information connections in a visual way for the consumer.

In August 2014, as the Ebola virus ravaged the country of Liberia, Syracuse journalism professor Ken Harper recruited me to use this same approach to help the Liberian government make sense of the firehose of information they were receiving that was not easily understandable for the best decision-making on the ground.

Working with Tony Blair's Commission for Africa, I took the raw data and visualized it in different forms to show trends and help key decision-makers make better health, transportation and supply strategies. This project began by creating a data dashboard for mobile devices for health and communications workers in the field. The overall project also included a desktop and projected version for Liberia's president and key leaders in the situation room. We also released the data visualizations to the general public and provided them in embeddable forms.

Throughout the project, we worked with the United Nations Data Initiative, US-AID and the White House deputy chief technology officer, building relationships that continue to aid other projects, including a recent request to help envision a new epidemic tracking software for the Center for Disease Control and US-AID.

A driving question for the Ebola project, as it is for most of my projects, is, "How can I make media more engaging?"

I took that question to the documentary video arena with a new technology project I call FilmSync. FilmSync is a second-screen experience to engage audiences with contextual information and dialogue. The technology enables people viewing films at home or in a theater to access additional, related information on their smart phones that coincides with the events unfolding on the screen using a patent-pending digital watermarking synchronization technology.

Now working with my colleague Chad Stevens through a Knight Protoype Grant of $35,000, FilmSync has evolved and expanded to include broadcast news, online education and live events. It will be a start-up company emerging from the UNC Media and Journalism School, leveraging the entrepreneurship and innovation initiatives on campus. An added bonus is that it should provide direct revenue to the school through royalties.

Given my fascination with testing out new media technologies, it is inevitable that a tell-tale cardboard box will appear on my front porch, my choice of gift-wrapping for anything from Oculus Rift 3-D glasses to a Leap Motion tracker to a quad-coptor HD-video-streaming drone.

One such device that became the fastest-selling technology of its kind to date is the Microsoft Connect motion tracker. With such immediate interest, I wanted to test the system and see how this advanced product would aid news consumption through gestures.

The 3-D U.S. Capitol dome project that intrigued Candace Crawford and Tony Romo is one product out of this original technology testing.

I have also pioneered a way to interact with news through a web browser using body motions, working together with developers at the Massachusetts Institute of Technology's renowned Media Lab. I then tested the viability of these gestures to consume news and social media content from various sites. Based on this research, I created optimized interfaces for gesture control and presented those findings at the Journalism Interactive conference, a gathering of academics and professionals for collaborative efforts.

Sitting in an aisle that day was the director of innovation for *The New York Times*. While we did not collaborate directly, months later he hired my Graduate Assistant Kathryn Faulkner to expand on my initial research and build the *Times'* first gesture-based news application.

Phone calls from *The New York Times* and *The Washington Post* (as was the case when the Oculus Rift glasses hit the market) asking, "What can we do with this new technology?" help ease any buyer's remorse I might have from a new technology purchase. Just tinkering with and exploring these new avenues has led to new partnerships with organizations like *Time* magazine to build future virtual reality-enabled storytelling in this emerging media.

Emerging media is what propels me forward in my academic pursuits. It is the next page on a roadmap I can't see yet but is waiting for me with the next Apple shareholders' meeting or National Association of Broadcasters' exhibit offerings. Often, a new frontier in media technologies is a solution to a problem we as journalists have wrestled with for years. Or it is a solution for another industry (health, security, transportation, the list is endless) that can benefit from journalism's innovation and UNC's intersection of storytelling and technology.