MULTIMEDIA STORYTELLING

2015 AVAP Conference

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MULTMEDIA STORYTELLING

I. INTRODUCTION
II. STORY IDEAS & CONSIDERATIONS
III. PRE-PRODUCTION
IV. PRODUCTION
V. POST-PRODUCTION
VI. SHARING & DISTRIBUTION
VII. QUESTIONS?

Multimedia Storytelling

I. INTRODUCTION

INTRODUCTION

What is multimedia?

- Video
- Photos
- Audio
- Music
- Voice
- Text
- Graphics
- Animation
- Data

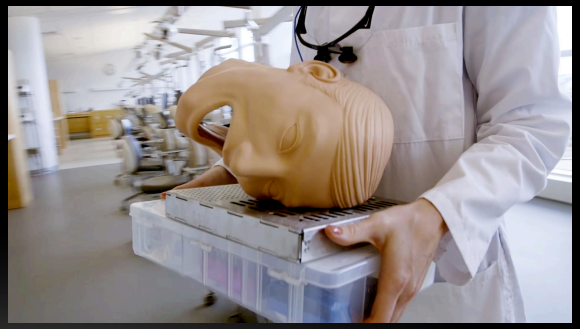
& more

INTRODUCTION

Today's Presentation:

- **Narrative Driven**
  -In the subject's voice
  -Editorial channels
  -ex. "Spiky, Slimy and Smooth"

- **Visually Driven**
  -Images only, not reliant on words
  -Social media channels
  -ex. "A Head for Dentistry"



Narrative Driven: “Fight or Flee”

Visually Driven: “A Head for Dentistry”

Multimedia Storytelling

II. STORY IDEAS & CONSIDERATIONS

STORY IDEAS & CONSIDERATIONS

How do we decide?

- Basic Considerations & Evaluation:
  - Is there a story?
  - Key themes, tie-ins, shared interests?
  - Balanced coverage- what schools/topics haven't we featured?
  - Lasting use or too time/event specific?
  - Length- can it be told in a brief video?
  - Relevance to a broad ***online*** audience?
  - Do we have the time in our schedule?

STORY IDEAS & CONSIDERATIONS

Total Work Hours

From Concept to Final Product

- Narrative Driven

  (If it requires 2 interviews)

  100-140 Hours

- Visually Driven

  (If it requires 3 separate shoots)

  80-100 Hours

STORY IDEAS & CONSIDERATIONS

Why should anyone ***else*** care?

(no offense)

Scene 1:

INT. UNIV. LAB - DAY

Michael McExpert and Steffan Hacker are seated across a table for a video interview.

HACKER
(smiling)
Who might care about your study?

McEXPERT
(frowning)
I do!

HACKER
(half-smiling)
Okay, but can you convince me to care?

McEXPERT
(flummoxed)
What? You're the one that asked me for this interview!

HACKER
(trying to smile)
Sorry, I meant to ask how this could affect the outside world?

McEXPERT
(deep breath, thoughtful moment)
Oh, hmmm, well, I really hope this study will lead to things that help a lot of people that are suffering.

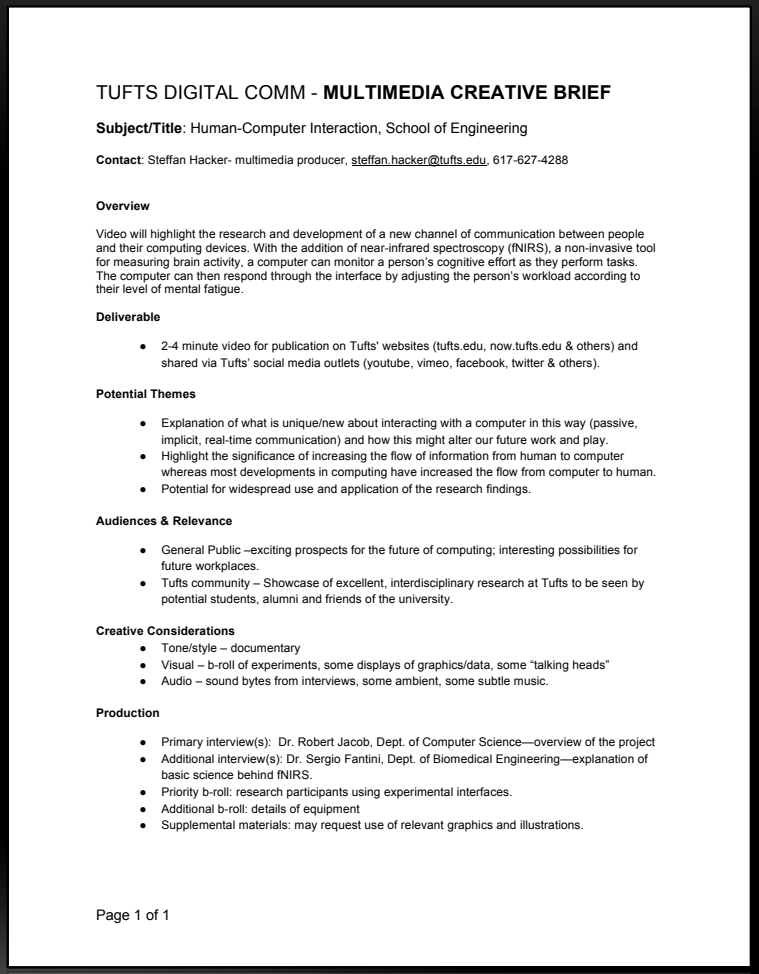
Multimedia Storytelling

III. PRE-PRODUCTION

PRE-PRODUCTION

Creative Brief

- Potential themes- idea should work in a sentence or two.
- Focus on meaning- information simply supports it.
- Interviews- “assigning roles”-who should talk about what.
- Collaborative effort- mutual understanding, shared efforts.



TUFTS DIGITAL COMM - **MULTIMEDIA CREATIVE BRIEF**

Subject/Title: Human-Computer Interaction, School of Engineering

Contact: Steffan Hacker- multimedia producer, steffan.hacker@tufts.edu, 617-627-4288

Overview

Video will highlight the research and development of a new channel of communication between people and their computing devices. With the addition of near-infrared spectroscopy (fNIRS), a non-invasive tool for measuring brain activity, a computer can monitor a person’s cognitive effort as they perform tasks. The computer can then respond through the interface by adjusting the person’s workload according to their level of mental fatigue.

Deliverable

- 2-4 minute video for publication on Tufts' websites (tufts.edu, now.tufts.edu & others) and shared via Tufts' social media outlets (youtube, vimeo, facebook, twitter & others).

Potential Themes

- Explanation of what is unique/new about interacting with a computer in this way (passive, implicit, real-time communication) and how this might alter our future work and play.
- Highlight the significance of increasing the flow of information from human to computer whereas most developments in computing have increased the flow from computer to human.
- Potential for widespread use and application of the research findings.

Audiences & Relevance

- General Public –exciting prospects for the future of computing; interesting possibilities for future workplaces.
- Tufts community – Showcase of excellent, interdisciplinary research at Tufts to be seen by potential students, alumni and friends of the university.

Creative Considerations

- Tone/style – documentary
- Visual – b-roll of experiments, some displays of graphics/data, some “talking heads”
- Audio – sound bytes from interviews, some ambient, some subtle music.

Production

- Primary interview(s): Dr. Robert Jacob, Dept. of Computer Science—overview of the project
- Additional interview(s): Dr. Sergio Fantini, Dept. of Biomedical Engineering—explanation of basic science behind fNIRS.
- Priority b-roll: research participants using experimental interfaces.
- Additional b-roll: details of equipment
- Supplemental materials: may request use of relevant graphics and illustrations.

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Multimedia Storytelling

IV. PRODUCTION

PRODUCTION

PRODUCTION

Interview Objective #1:

Get the interviewee to say it all.

(Leaving you no _____ to fill in.)

PRODUCTION

Interviewing Methods

- Get answers in full sentences

  Q: What's your favorite color?

  A: My favorite color is blue.

  ~~A: Blue.~~
- Get a Literal description

  -Proper nouns for who, what, where etc.

  ~~-He, it, there etc.~~
- Get a "big picture" explanation

  -What does it all mean?

  -How does this make you feel?
- Ask the same question again (and again and again)

  -"Can you answer that again but this time . . ."

PRODUCTION

Interviewing Tactics

- Play a role: “Pretend I’m _____”

  a space alien

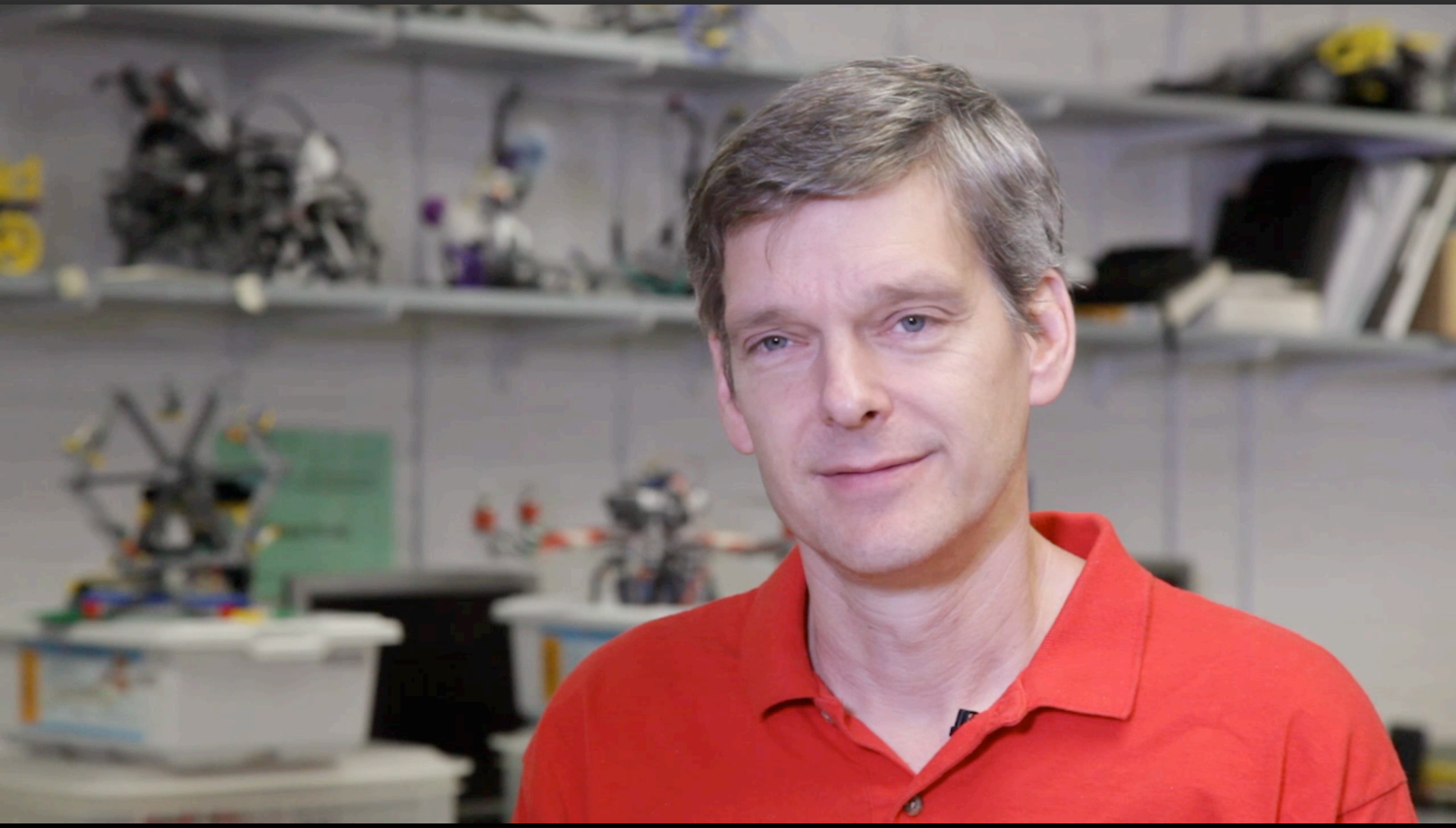
  your smart nephew who’s still in middle school

  just plain stupid
- Compliment & Flatter
- Contradict & Challenge

  -Triggers a rebuttal

  -Provides a chance to address skepticism

Interviewing Tactics



PRODUCTION

B-roll & Visuals

What's there to shoot?

Action

Action – “Art in the Round”

Action – “Simulating Disaster”

PRODUCTION

B-roll & Visuals

What's there to shoot?

Action

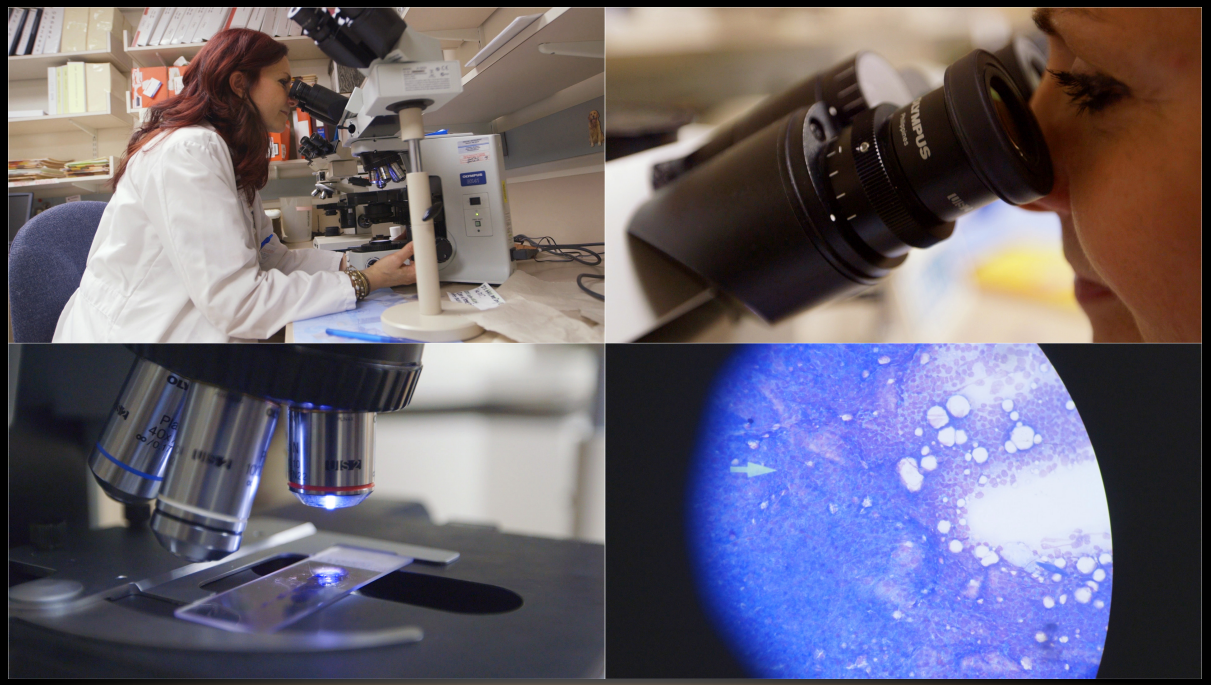
(sort of)

Action (sort of) – Human Computer Interaction

PRODUCTION

B-roll & Visuals

Break it down



PRODUCTION

B-roll & Visuals

What else ya got?

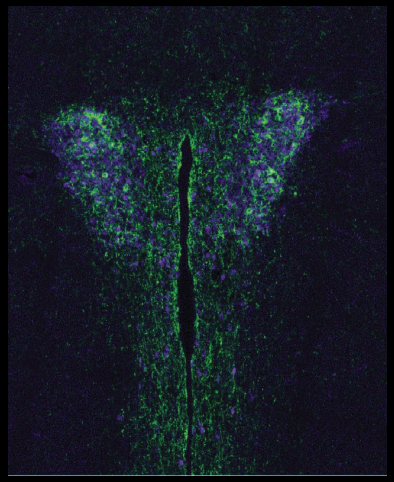
Illustrations, graphics, charts, photos . . .

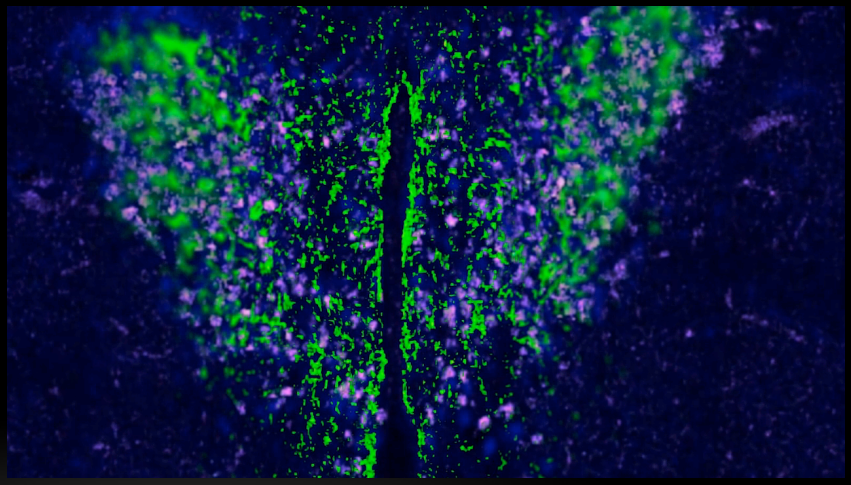
PRODUCTION

B-roll & Visuals

Animating provided illustrations

"Fight or Flee"



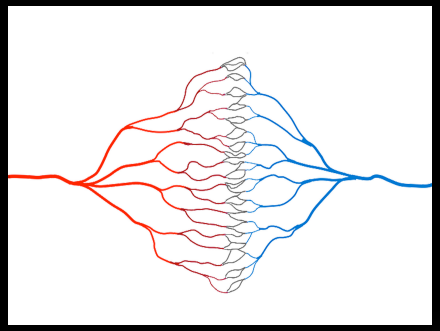


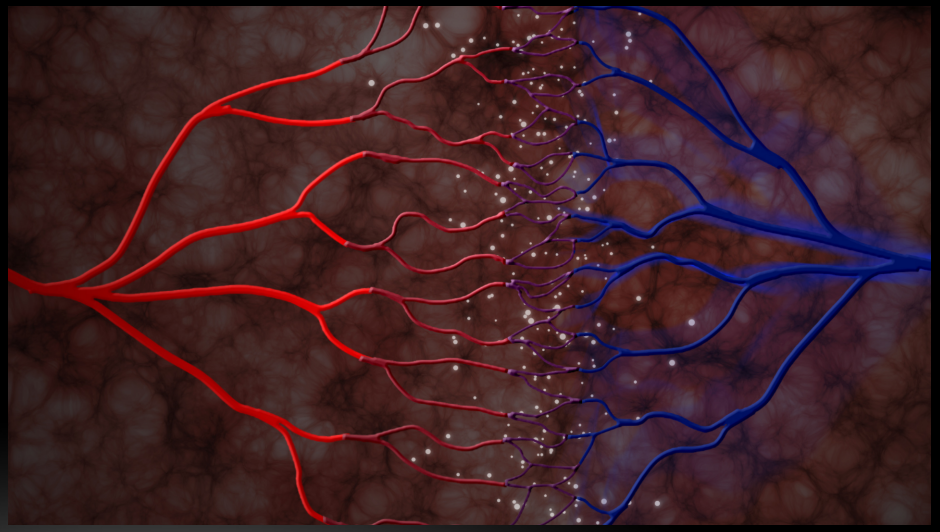
PRODUCTION

B-roll & Visuals

Animating provided illustrations

Human Computer Interaction

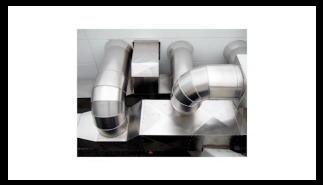




PRODUCTION

Recording Audio

Beware the troublemakers.



PRODUCTION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Multimedia Storytelling

V. POST-PRODUCTION

POST-PRODUCTION

Short takes longer.

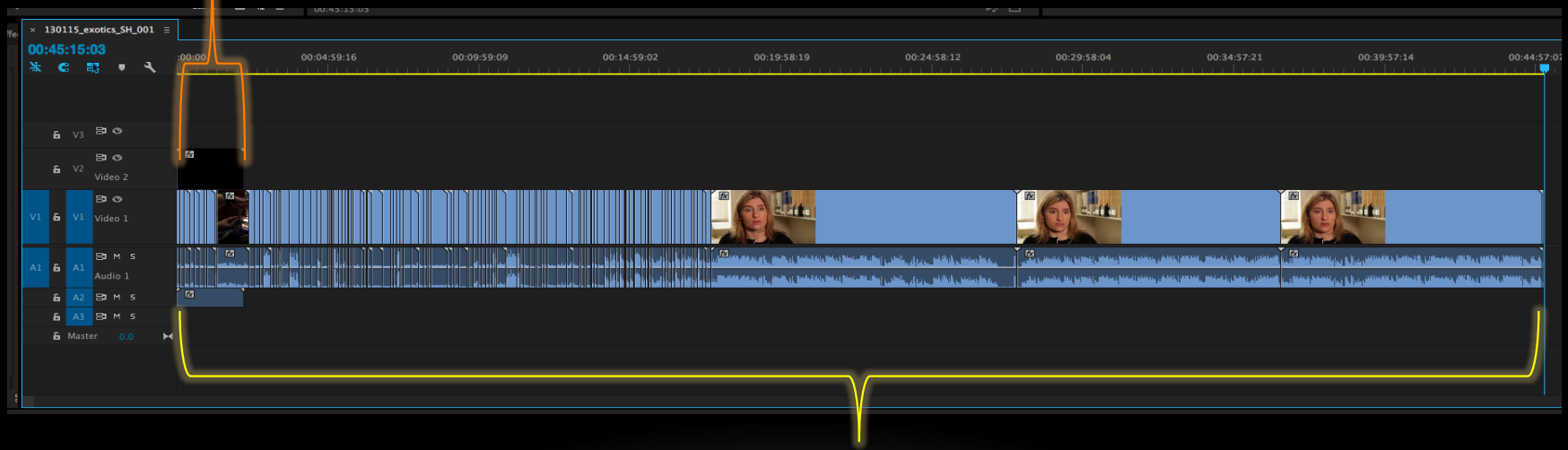
Simple is harder.

POST-PRODUCTION

POST-PRODUCTION

"Spiky, Slimy and Smooth"

Final Piece 2 min. 15 sec.

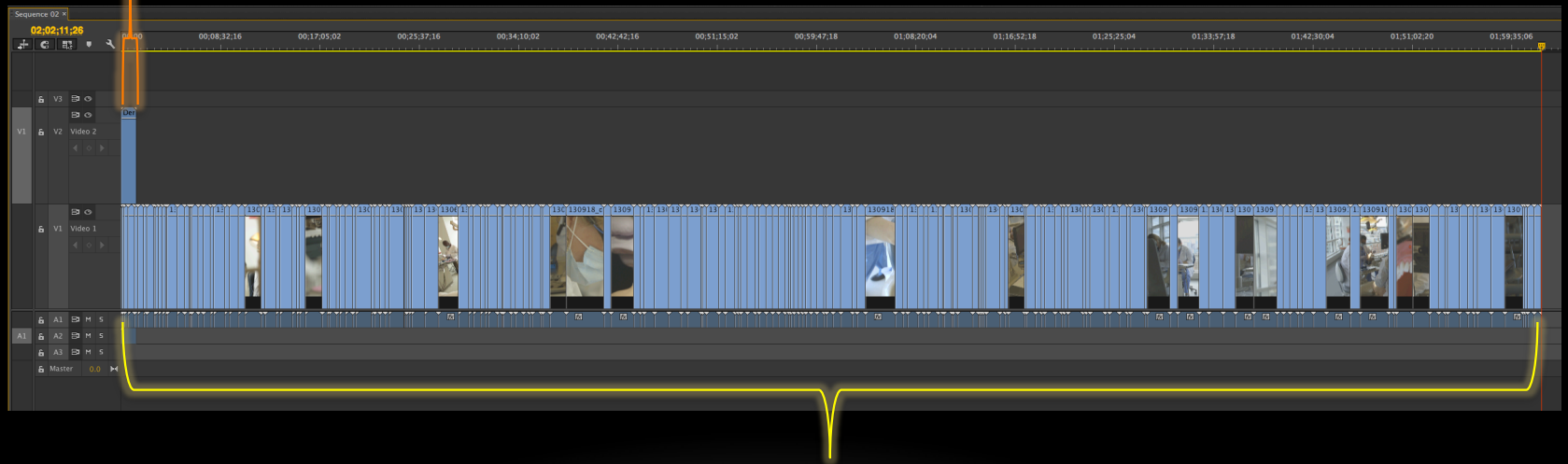


Raw Footage 45 min. 15 sec.

POST-PRODUCTION

“A Head for Dentistry”

Final Piece 1 min. 12 sec.

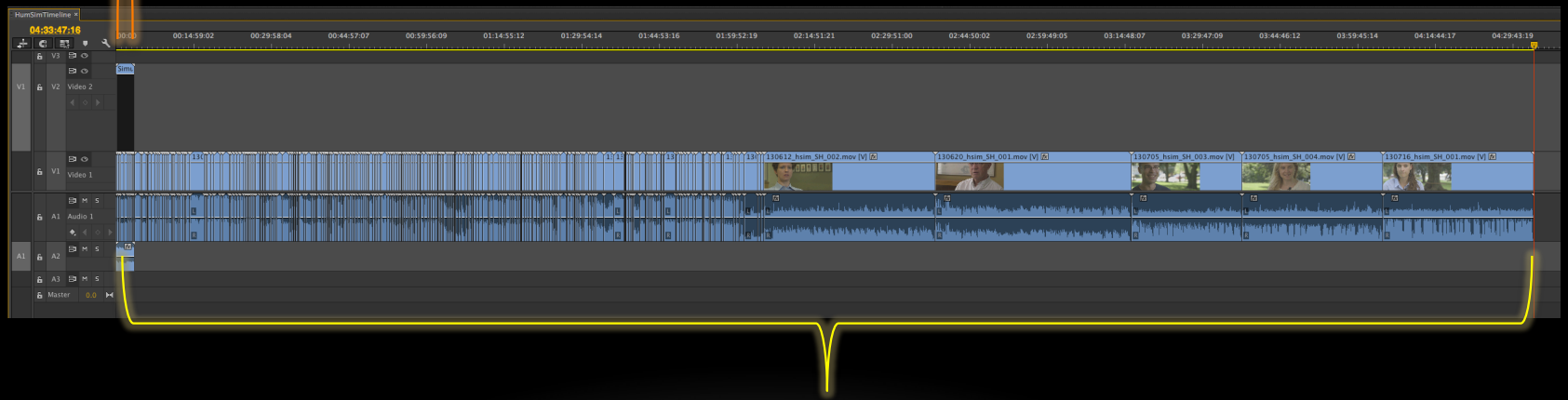


Raw Footage 2 hrs. 2 min.

POST-PRODUCTION

“Simulating Disaster”

Final Piece 3 min. 37 sec.



Raw Footage 4 hrs. 33 min.

POST-PRODUCTION

Processing Interviews

- Transcribe *(go slow to get fast)*
- Find the strongest and simplest bytes
- Arrange, rearrange, rearrange . . .
- Cut bytes, polish

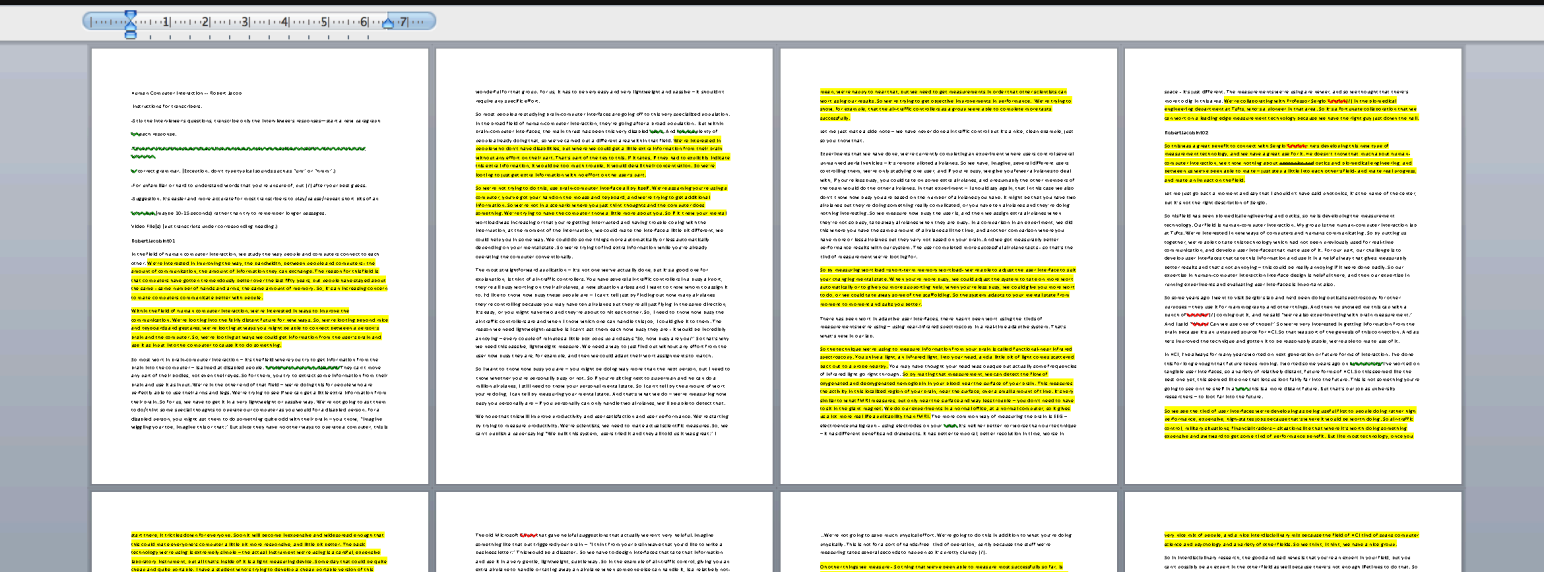
POST-PRODUCTION

Processing Interviews

Word Count Rule of Thumb

- Slower delivery: 60 words/minute
- Medium delivery: 180 words/minute
- Faster delivery: 300 words/minute

POST-PRODUCTION



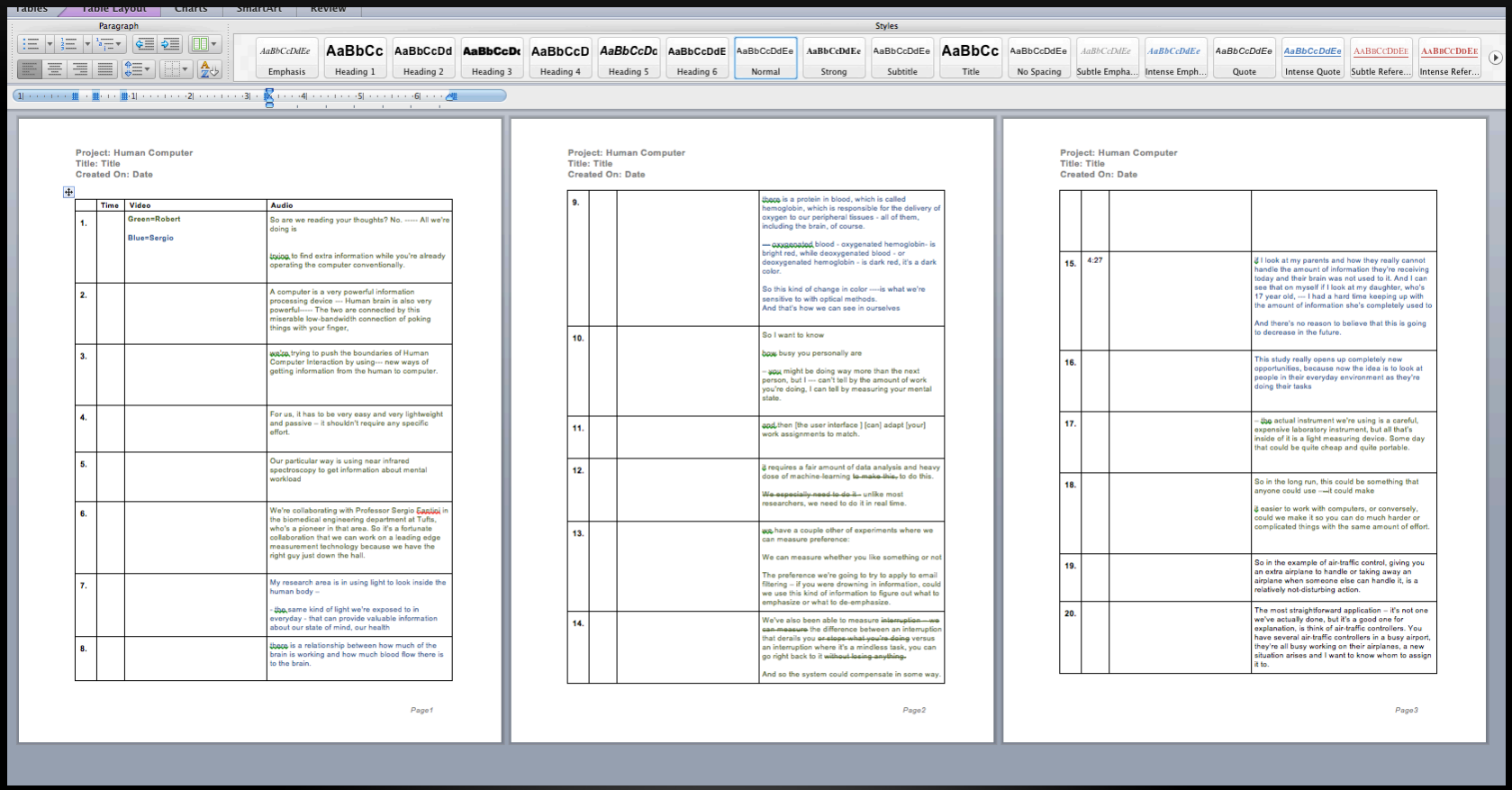
POST-PRODUCTION

cheap and quite portable. I have a student who's trying to develop a cheap portable version of this already. So in the long run, this could be something that anyone could use – it's very easy to set up, it could be cheap someday, and it could make your computer a little more responsive than it would otherwise be.

So are we reading your thoughts? No. ~~Could we someday read your thoughts? Who knows. Not for a very long time.~~ All we're doing is measuring the amount of blood flowing near the surface of your brain, and it relates to how hard you're working, how hard you're thinking, or how much you're holding in your memory. So our work has been covered in a variety of news media, and to our delight, people have not been extremely paranoid about the possibility of mind control. It's hard to say, but it will be a very long time before computers can read your thoughts so probably beyond all of our lifetimes.

So [what I'm most excited about is] the idea of improving the connection between people and computers, of not having to suffer the slow awkwardness of the way we now communicate. A computer

POST-PRODUCTION



Project: Human Computer
Title: Title
Created On: Date

	Time	Video	Audio
1.		Green=Robert Blue=Sergio	So are we reading your thoughts? No. ----- All we're doing is trying to find extra information while you're already operating the computer conventionally.
2.			A computer is a very powerful information processing device --- Human brain is also very powerful---- The two are connected by this miserable low-bandwidth connection of poking things with your finger,
3.			we're trying to push the boundaries of Human Computer Interaction by using--- new ways of getting information from the human to computer.
4.			For us, it has to be very easy and very lightweight and passive – it shouldn't require any specific effort.
5.			Our particular way is using near infrared spectroscopy to get information about mental workload
6.			We're collaborating with Professor Sergio Fantini in the biomedical engineering department at Tufts, who's a pioneer in that area. So it's a fortunate collaboration that we can work on a leading edge measurement technology because we have the right guy just down the hall.
7.			My research area is in using light to look inside the human body – - the same kind of light we're exposed to in everyday - that can provide valuable information about our state of mind, our health
8.			Hbo2 is a relationship between how much of the brain is working and how much blood flow there is to the brain.

Project: Human Computer
Title: Title
Created On: Date

9.			Hbo2 is a protein in blood, which is called hemoglobin, which is responsible for the delivery of oxygen to our peripheral tissues - all of them, including the brain, of course. — oxygenated blood - oxygenated hemoglobin- is bright red, while deoxygenated blood - or deoxygenated hemoglobin - is dark red, it's a dark color. So this kind of change in color ----is what we're sensitive to with optical methods. And that's how we can see in ourselves
10.			So I want to know how busy you personally are - you might be doing way more than the next person, but I --- can't tell by the amount of work you're doing, I can tell by measuring your mental state.
11.			and then [the user interface] [can] adapt [your] work assignments to match.
12.			it requires a fair amount of data analysis and heavy dose of machine-learning to make this, to do this. We especially need to do it – unlike most researchers, we need to do it in real time.
13.			we have a couple other of experiments where we can measure preference: We can measure whether you like something or not The preference we're going to try to apply to email filtering – if you were drowning in information, could we use this kind of information to figure out what to emphasize or what to de-emphasize.
14.			We've also been able to measure interruption – we can measure the difference between an interruption that derails you or stops what you're doing versus an interruption where it's a mindless task, you can go right back to it without losing anything. And so the system could compensate in some way.

Project: Human Computer
Title: Title
Created On: Date

15.	4:27		If I look at my parents and how they really cannot handle the amount of information they're receiving today and their brain was not used to it. And I can see that on myself if I look at my daughter, who's 17 year old, --- I had a hard time keeping up with the amount of information she's completely used to And there's no reason to believe that this is going to decrease in the future.
16.			This study really opens up completely new opportunities, because now the idea is to look at people in their everyday environment as they're doing their tasks
17.			– the actual instrument we're using is a careful, expensive laboratory instrument, but all that's inside of it is a light measuring device. Some day that could be quite cheap and quite portable.
18.			So in the long run, this could be something that anyone could use ---it could make it easier to work with computers, or conversely, could we make it so you can do much harder or complicated things with the same amount of effort.
19.			So in the example of air-traffic control, giving you an extra airplane to handle or taking away an airplane when someone else can handle it, is a relatively not-disturbing action.
20.			The most straightforward application – it's not one we've actually done, but it's a good one for explanation, is think of air-traffic controllers. You have several air-traffic controllers in a busy airport, they're all busy working on their airplanes, a new situation arises and I want to know whom to assign it to.

POST-PRODUCTION

Processing B-roll

- Organize and categorize *(go slow to get fast)*
- Find what matches script
- Find what doesn’t need to match the script
- Think of sums not parts

POST-PRODUCTION

Putting it all together

- First listen, then watch
- Eliminate repetition (yes, even paraphrase)
- Refine audio editing (the least forgiving aspect)
- Evaluate visuals (do they match/should they match?)

POST-PRODUCTION

Current project: Tufts Comparative Oncology

Multimedia Storytelling

VI. SHARING & DISTRIBUTION

SHARING & DISTRIBUTION

Ways you can use them

- Departmental Website(s) and Blog(s)
- Departmental Social Media Channel(s)
- Direct Distribution
- Print Publications
- Events, Meetings and Presentations
- Outside Organizations
- Encouraging Video Sharing by Individuals

“Mind-reading Computers?”

Multimedia Storytelling

VII. QUESTIONS?

QUESTIONS?

Contact me:

steffan.hacker@tufts.edu

See more videos:

now.tufts.edu/multimedia

vimeo.com/tuftsu

youtube.com/tuftsu