

Customs and Border Protection –
Advanced Developments
Encompassing Processes and Technologies (CBP-ADEPT)
Workshop 2:

Advanced Development and Processes for Tomorrow

Workshop Objectives



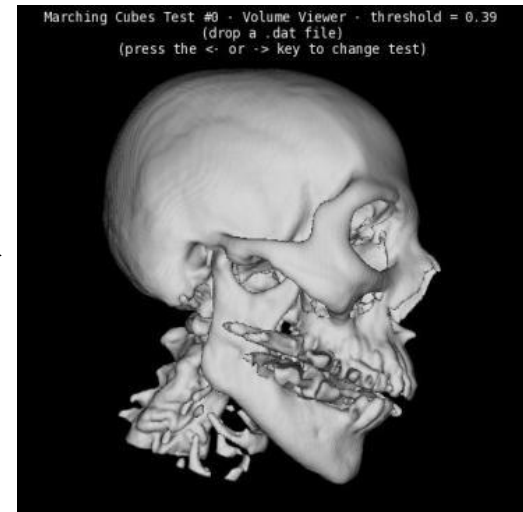
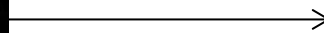
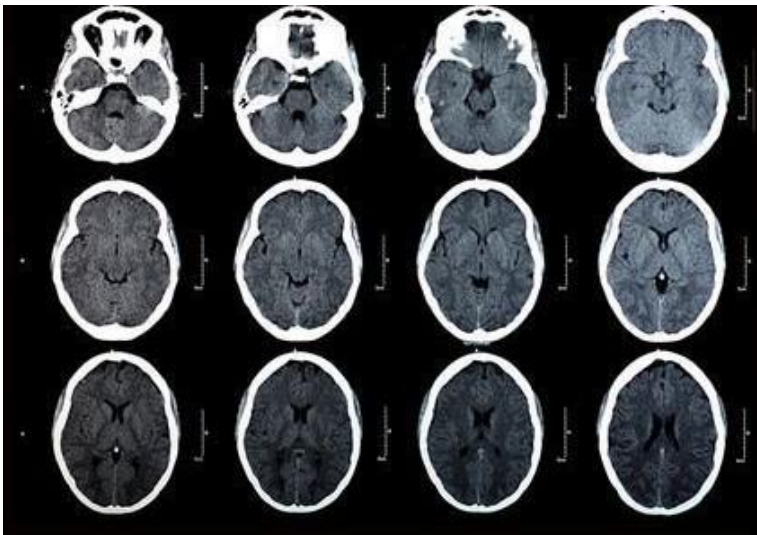
Carl R. Crawford
Csuptwo, LLC

So What? Who Cares?

- People needing enhanced technology should present their needs and requirements for enhanced technology
 - Offer funding for technology development
 - Procure enhanced equipment
- Innovators should think about how they can develop enhanced technology
- People with enhanced technology should present their technology to CBP
 - Eventually make a profit

Medical Imaging Example

- GE told me to lead project to develop 3D images of skulls
- Did not have the technical expertise, which was okay with GE



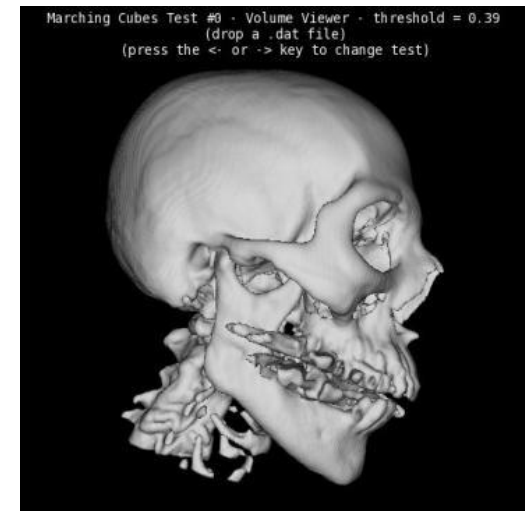
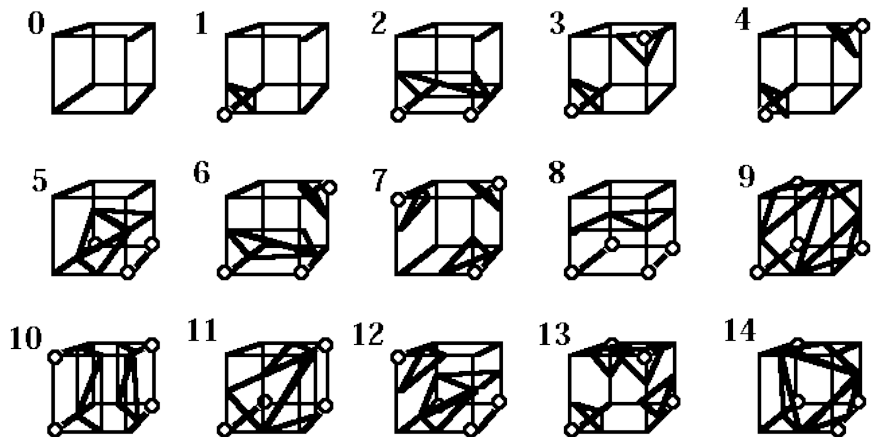
A Man from Milwaukee

- "Creative Energy: GE's Latest Invention – A Way to Move Ideas From Lab to Market," Wall Street Journal, June, 1990.
- Four years ago, metallurgist Harvey Cline was developing a method of measuring the surface topography of silicon chips, which would show the wafers' defects. The technique essentially involved measuring three dimensions of hair-thin surfaces. Then one day, **GE's medical division sent a man from Milwaukee to talk at the R&D center** about the need for three-dimensional imaging for medical purposes.



A Man From Milwaukee (2)

- Lorensen & Cline invent marching and dividing cubes (and become famous)
- GE Medical deploys first high-speed 3D display package for medical imaging



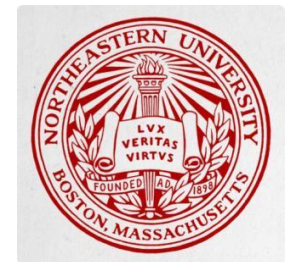
CBP: Don't Be Afraid to Ask For Help

ADEPT Format

- This is a workshop, not a conference
 - Speakers are instructed to begin with “So What? Who Cares?” (elevator speech)
 - Crawford bears responsibility for format (and agenda)
 - Conversation and questions are expected at all times, especially during presentations after first slide
 - Optimal presentation ends after first slide
- Public domain – no SSI or classified material
- No speaker introductions; read handouts
- Everyone participates (switch to this venue)
- No picture taking, video/audio recording

Acknowledgements

- Northeastern University (NEU)
- Awareness and Localization of Explosives-Related Threats (ALERT) DHS Center of Excellence
- Department of Homeland Security (DHS)
- Presenters
- Participants



Logistics

- Tiffany Lam, lead
- Sara Baier
- Deanna Beirne
- Natalie Camacho
- Kristin Hicks
- Anne Magrath
- Pooja Ravichandran

BACKUP SLIDES

DHS Tactics

- Augment abilities of vendors with 3rd parties
 - Academia
 - National labs
 - Industry other than the vendors
- Create centers of excellence (COE) at universities
- Hold workshops to educate 3rd parties and discuss issues with involvement of 3rd parties
 - Algorithm Development for Security Applications (ADSA)
- Forage for technology in other fields

Archival Materials

- Final reports and presentations
 - Previous workshops
 - Task orders
 - CT segmentation, reconstruction, ATR
 - Adaptive ATR (AATR)
 - CLASP (video tracking of PAX/DVI)

https://myfiles.neu.edu/groups/ALERT/strategic_studies/