Robots on the Dig: 3D Scanning for Archeology & Material Culture

Ian Roy
Director for Research Technology and Innovation
Founding Head of Brandeis MakerLab
Adjunct Professor at Brandeis International Business School
Lecturer in Anthropology
ianroy@brandeis.edu
What is Research Technology and Innovation?
**WHAT IS RTI?**

### What we do

**Teaching & Learning**
Curricular lectures in emerging technology, weekly trainings, and workshops.

**Hackathons & Events**
24 hour programming challenges and prototyping challenges, speaker series, and sponsored maker in residence projects.

**Research Technology**
Prototyping physical objects and new workflows, digitization, and digital fabrication.

**Outreach**
 Talks, tours, and building community.

### Tools we use

**Digital Fabrication**
Tools that physicalize the digital world (3D printers, laser cutters, CNC).

**Digitization and 3D Scanning**
Tools that digitize the real world (3D scanning, computer vision).

**Virtual and Augmented Reality**
Hardware and software for virtual reality and augmented reality (HMD, touch, gesture, and multiscreen environments).

**Embedded Systems**
Hardware and software for prototyping embedded systems and robotics.
WHAT IS RTI?
CASTLE DATA – 1000+ PHOTOS ALLIGNED
EXTREME MACRO
- Canon T4i
- 24mm lens
- F8
- 1/4 sec
- ISO 100
- 371 pics
The SCAPP bot