



Compressive Sensing

Benjamin Maltbie

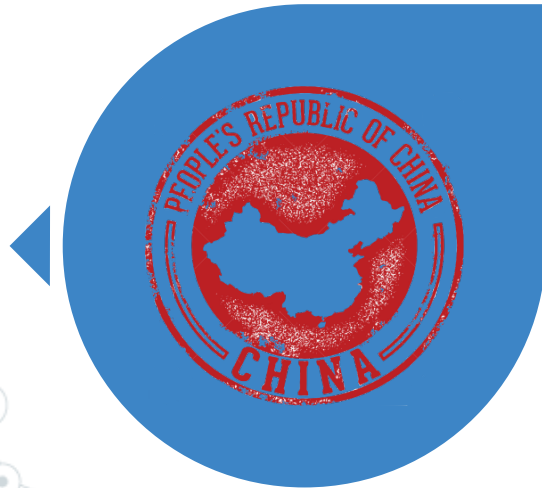
Benjamin Maltbie

Phoenix, AZ
11 years



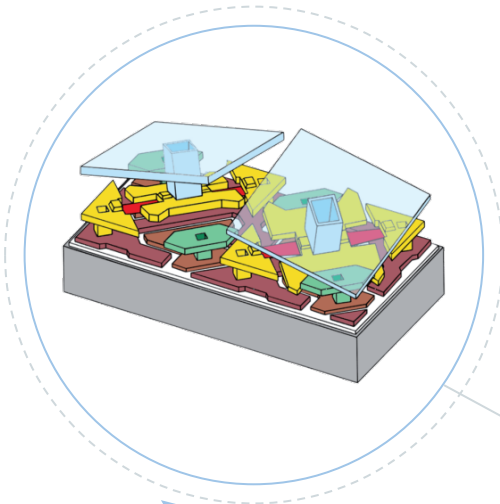
I-SENSE REU
Dr. Bing Ouyang

Shanghai, China
8 years



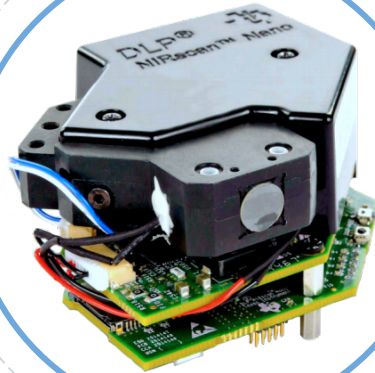
Georgetown
University

Background



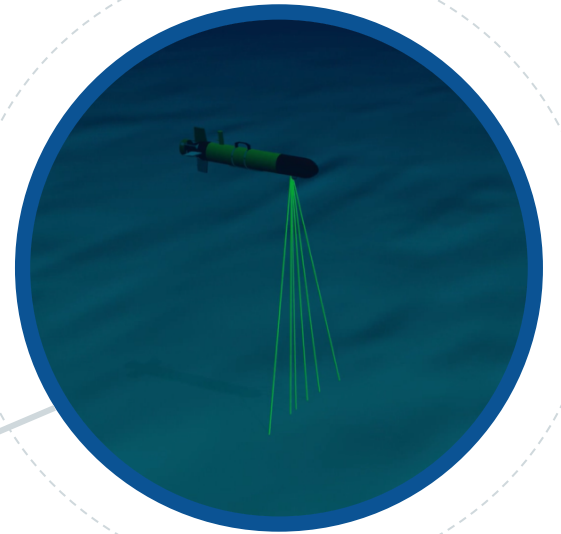
Micromirror

- ▶ rotate +/- 10° for on/off



Digital Micromirror Device (DMD)

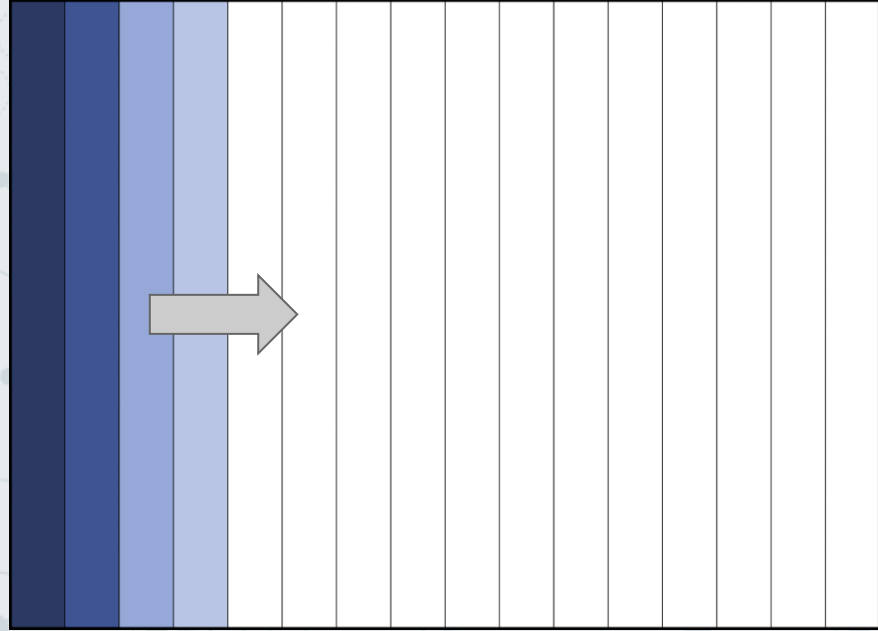
- ▶ low cost
- ▶ software limitations



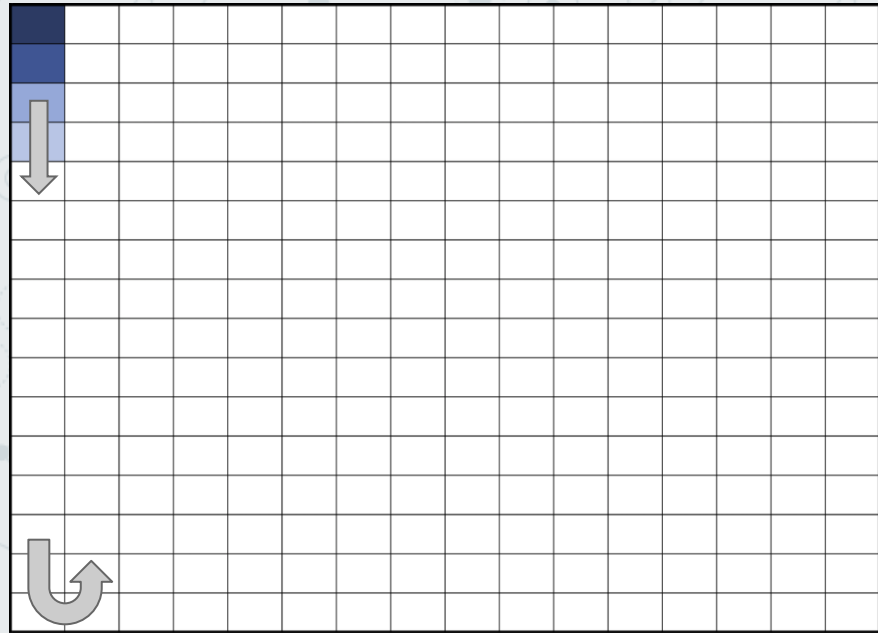
Underwater Autonomous Vehicle (UAV)



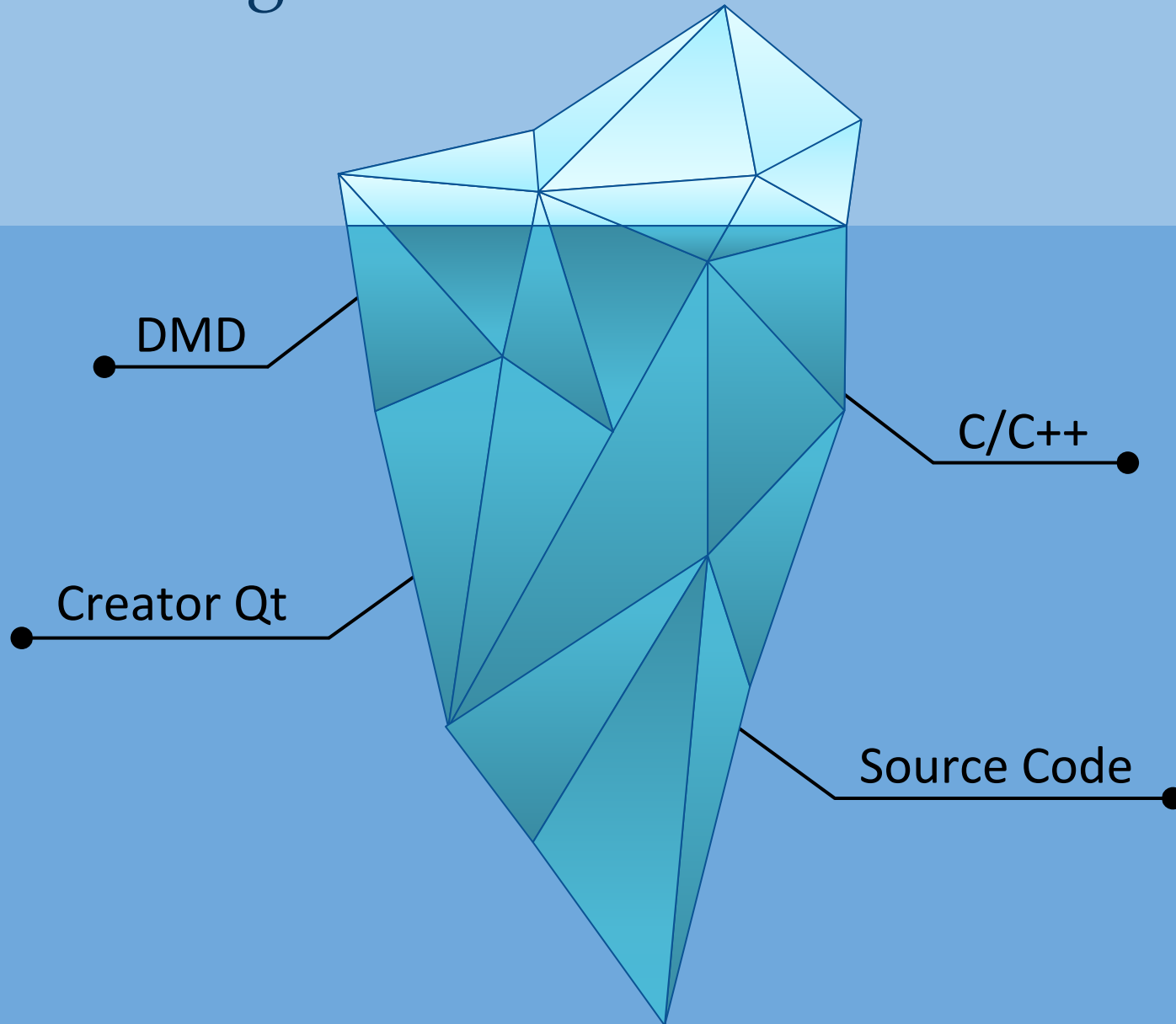
Column Scan
(original)



Grid Scan
(updated)



Challenges





Future Work

Color map

Debug helper

Scan queue

The background of the slide is a light gray network of interconnected nodes and lines. The nodes are represented by small circles, some of which are solid gray, while others are hollow with a dashed outline. The lines connecting them are thin and light gray, creating a complex, web-like pattern across the entire slide.

Thank you!

Any questions?