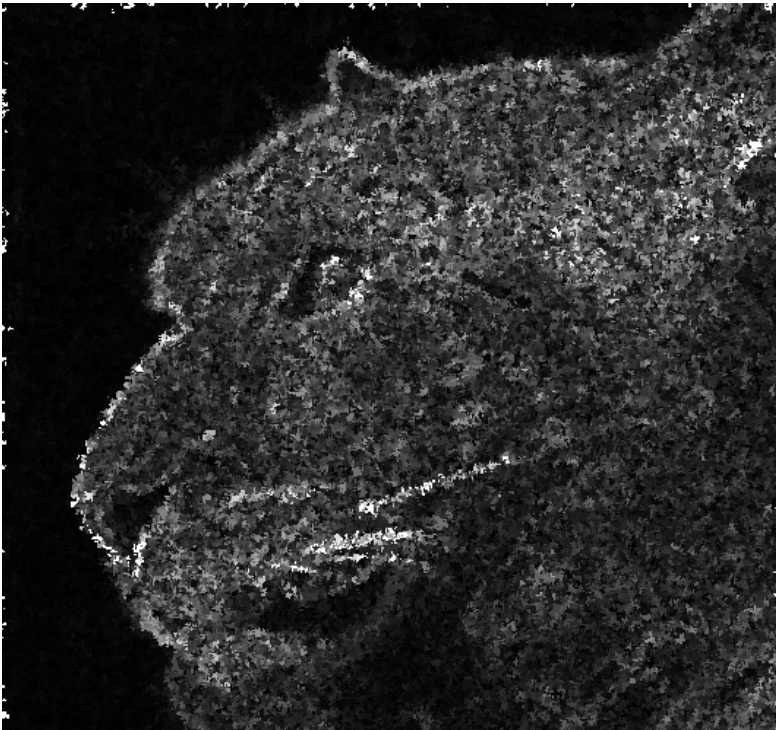
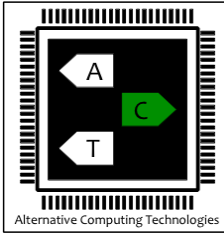


AXGAMES: Towards Crowdsourcing Quality Target Determination in Approximate Computing

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Alternative Computing Technologies (ACT) Lab
Georgia Institute of Technology



Is this approximate output
Good Enough?

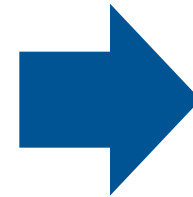
Who should decide?

Programmer? Users?

Crowd!

Survey

Strongly agree ☐
Agree ☒
Disagree ☐
Strongly disagree ☐



Costly



Boring



Game

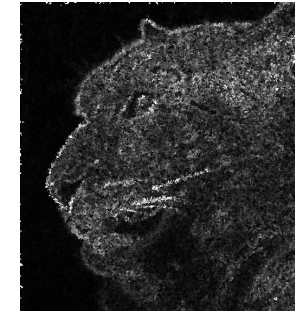


Fun/Entertaining

Easy

Self-Motivating

AXGAMES



1

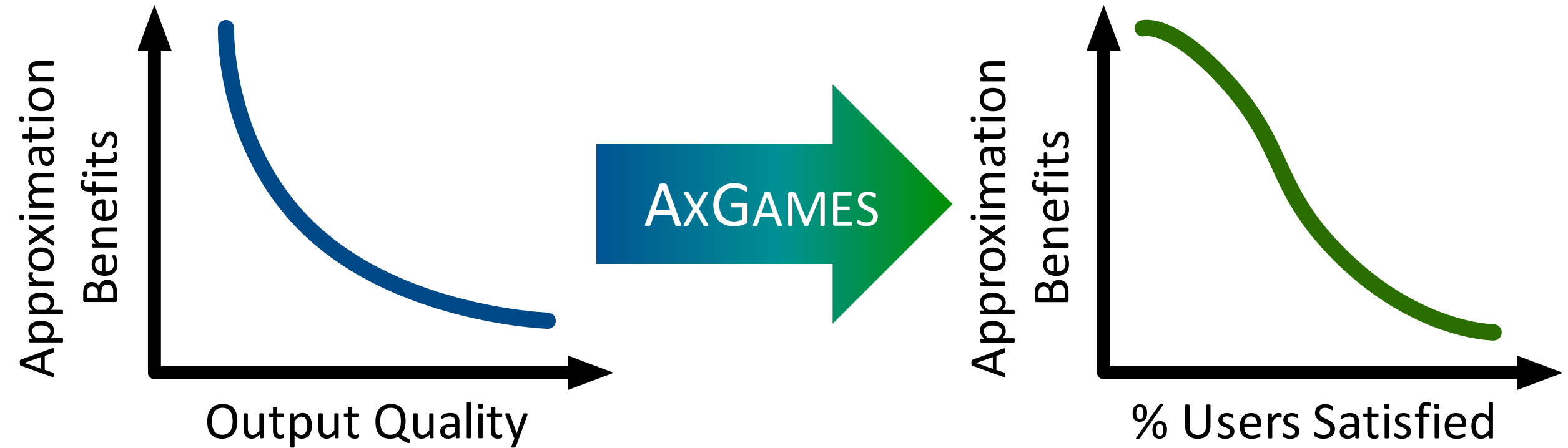
$$\Gamma \chi \Sigma^{\lambda} \mu$$

$$\left(\frac{1}{1 + \frac{(n_{\text{trials}} - n_{\text{success}} + 1)}{n_{\text{success}} \times F[1 - \alpha; 2n_{\text{success}}, 2(n_{\text{trials}} - n_{\text{success}} + 1)]}} < \text{SuccessRate} \right)$$



Statistical Common Ground

Transforming the tradeoff in approximate computing



Non-traditional Computer Systems

[Session 7A]

At 11AM

Come and Play 😊!

