CODE CRAFTERS:

Fostering Public Engagement in Computational Thinking by Leveraging Quilting Communities and Practices

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QUILTERS' PERCEPTIONS OF COMPUTING VS QUILTING

INNATE VS. LEARNED SKILLS
STEM skills are innate, quilting skills are learned.

COMPUTING AS PERSONAL EXPRESSION
Motivation to learn is increased when computing is an aid to personal expression through quilting.

AVOIDING COMPUTING
Some older quilters still avoid technology unless absolutely necessary.

TIME INVESTMENT/TANGIBLE REWARD
STEM workshops are worth their time if it results in something tangible.

COMMUNITY INFLUENCE ON MOTIVATION AND LEARNING
Community is a motivator for learning STEM, both in person and online.

SYSTEMATIC PREJUDICE AND EFFECTS
Identity is a barrier when it comes to learning and receiving recognition in STEM fields.

> I hadn't really thought about **how quilting and computer science were alike**, because, you know, they're not. But it's probably because **[computer science is] not typically associated with quilting.**
>
> But once I started thinking about it, I was like oh my god it's like this and oh my god it's like that...I have an algorithm or a rule that I set, or I'm doing something over and over again the same way. **[Quilting is] very much like programming and computer science.**

- Code Crafters Workshop Participant
post-workshop interview

CODE CRAFTERS WORKSHOPS
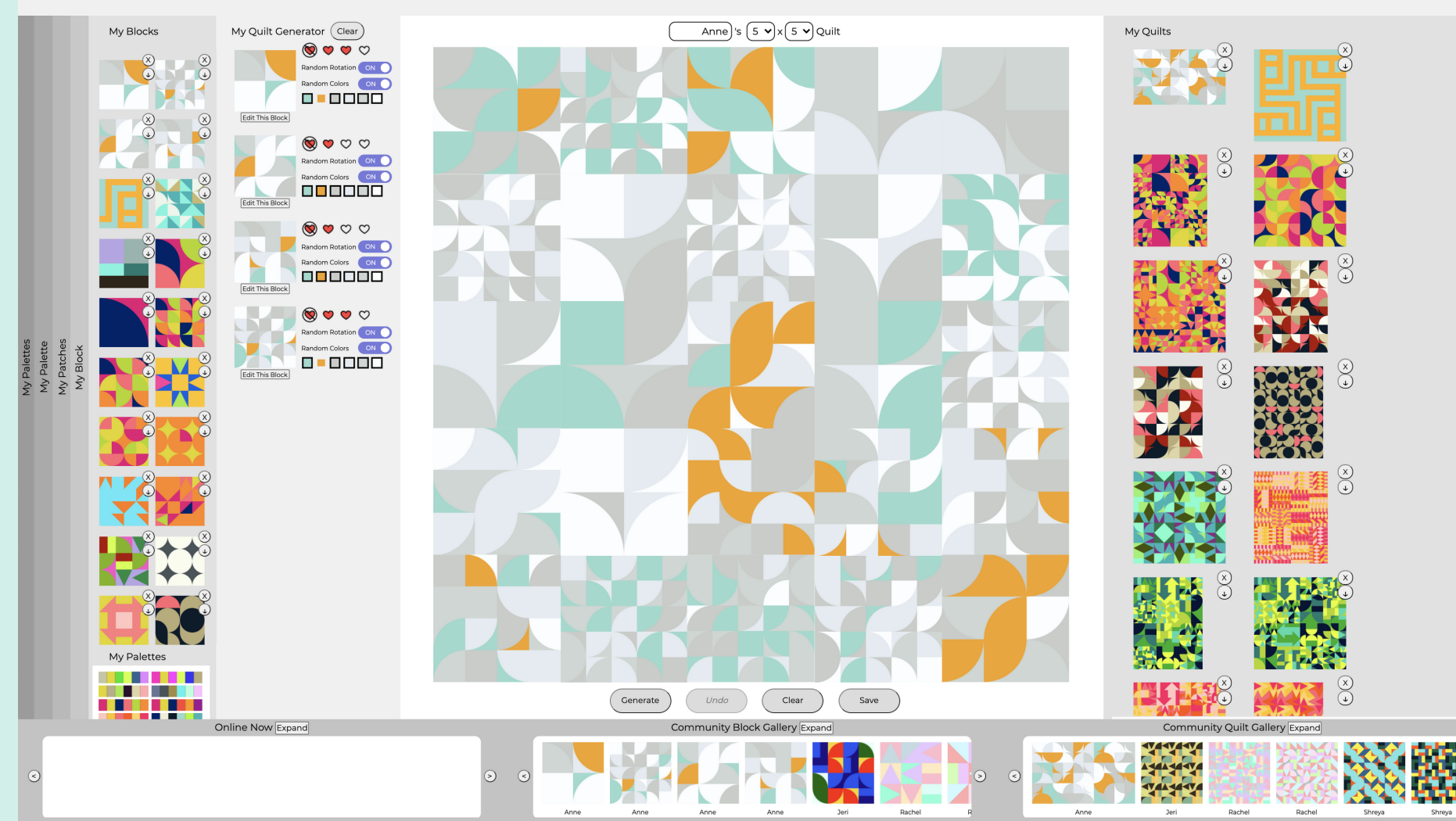
FOSTERING LEARNING
Workshop activities include participant-led discussions around computing and quilting. Workshops designed to celebrate what participants know and draw parallels around their existing knowledge.

BROADENING CREATIVITY
Software designed to generate quilt designs, but allow the quilter to provide constraints to the software.

COMMUNITY BUILDING
Software provides shared galleries and active view of what others are designing creates potential for social connections.

CODE CRAFTERS QUILT DESIGN SOFTWARE CREATED FOR USE IN WORKSHOPS