Go and The Art of Software Development

a presentation by

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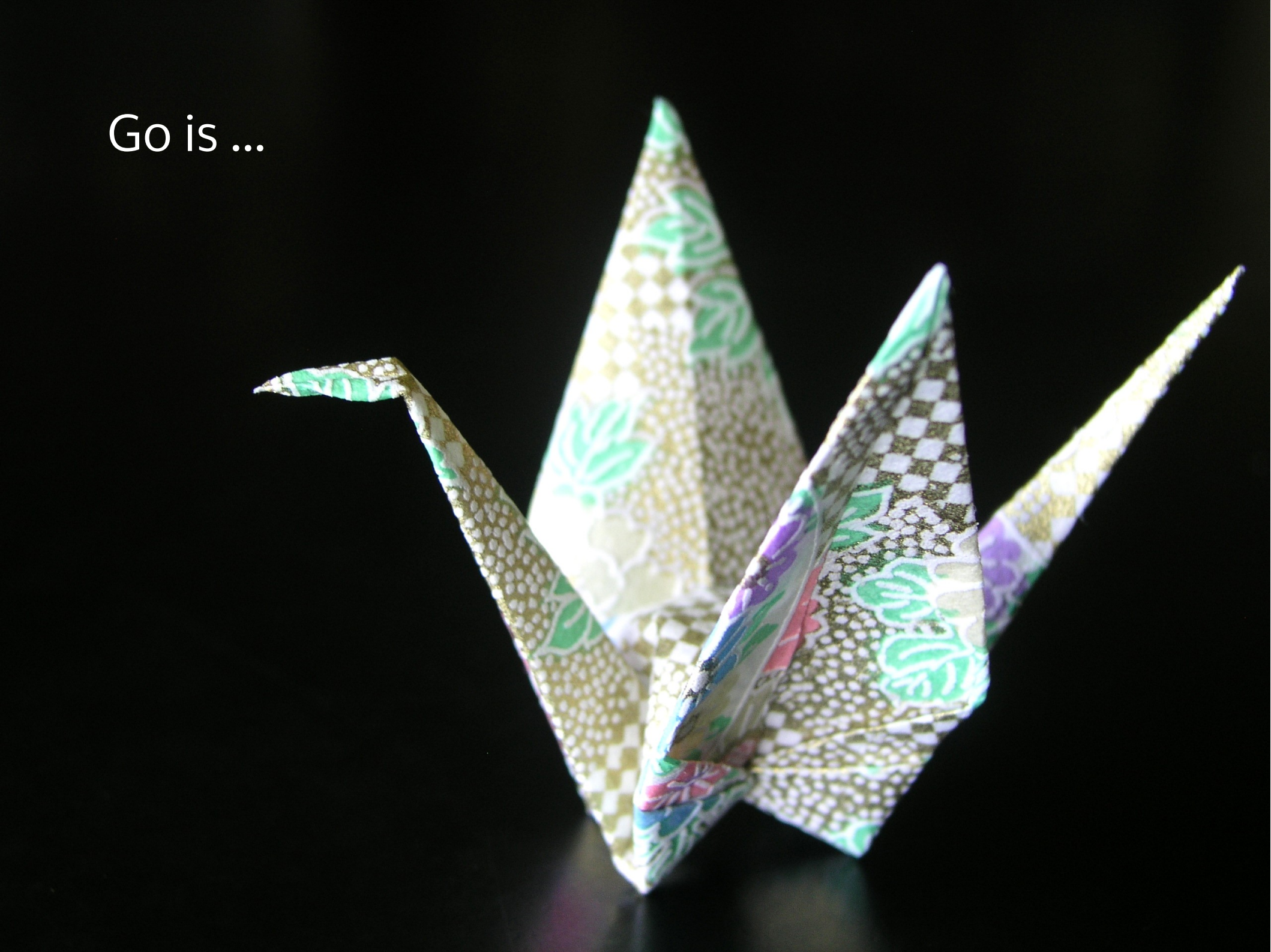
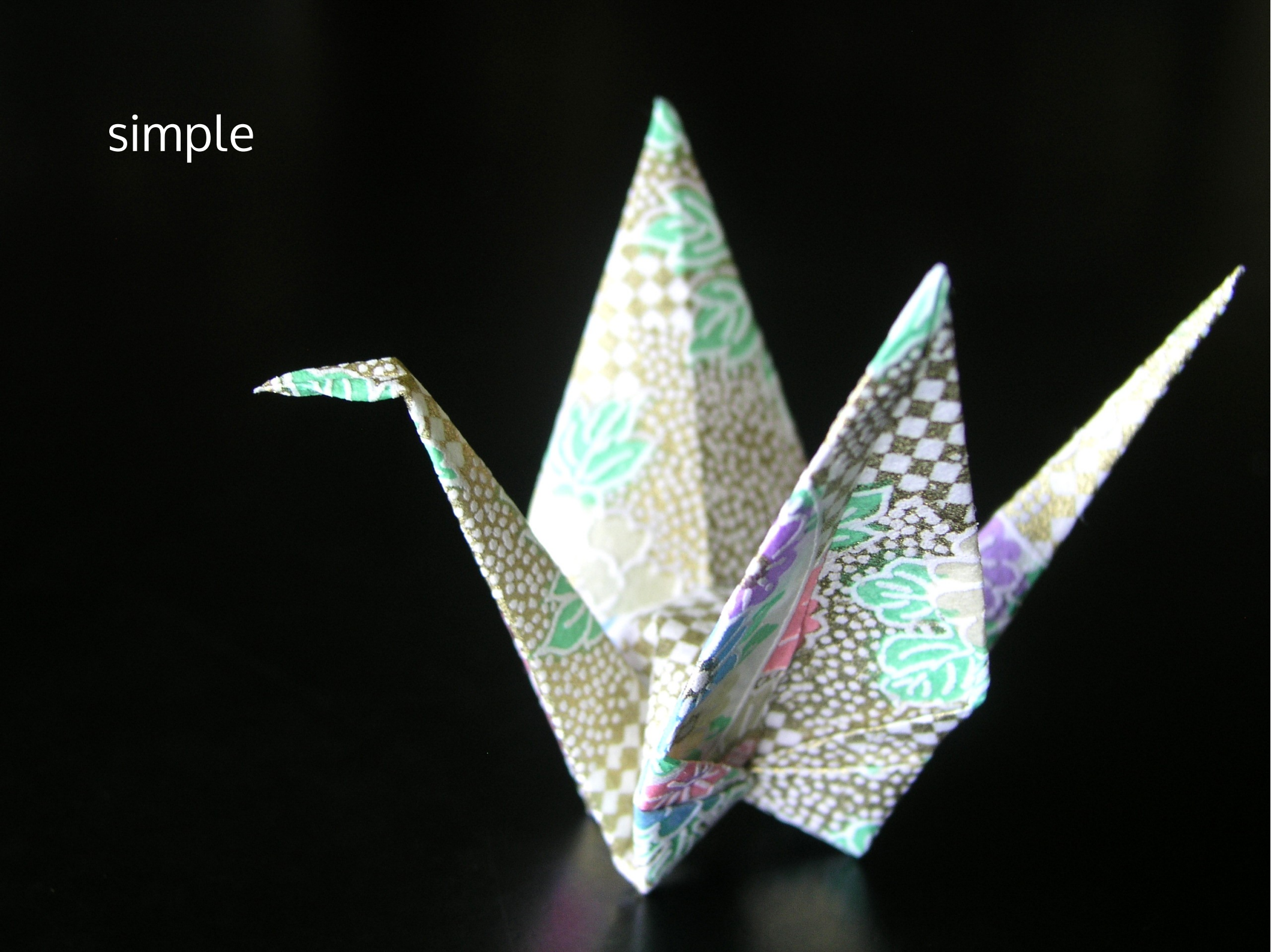
free software [developer, advocate, thinker]

Software is not nearly as good as it could be,
and we have no one to blame but ourselves.

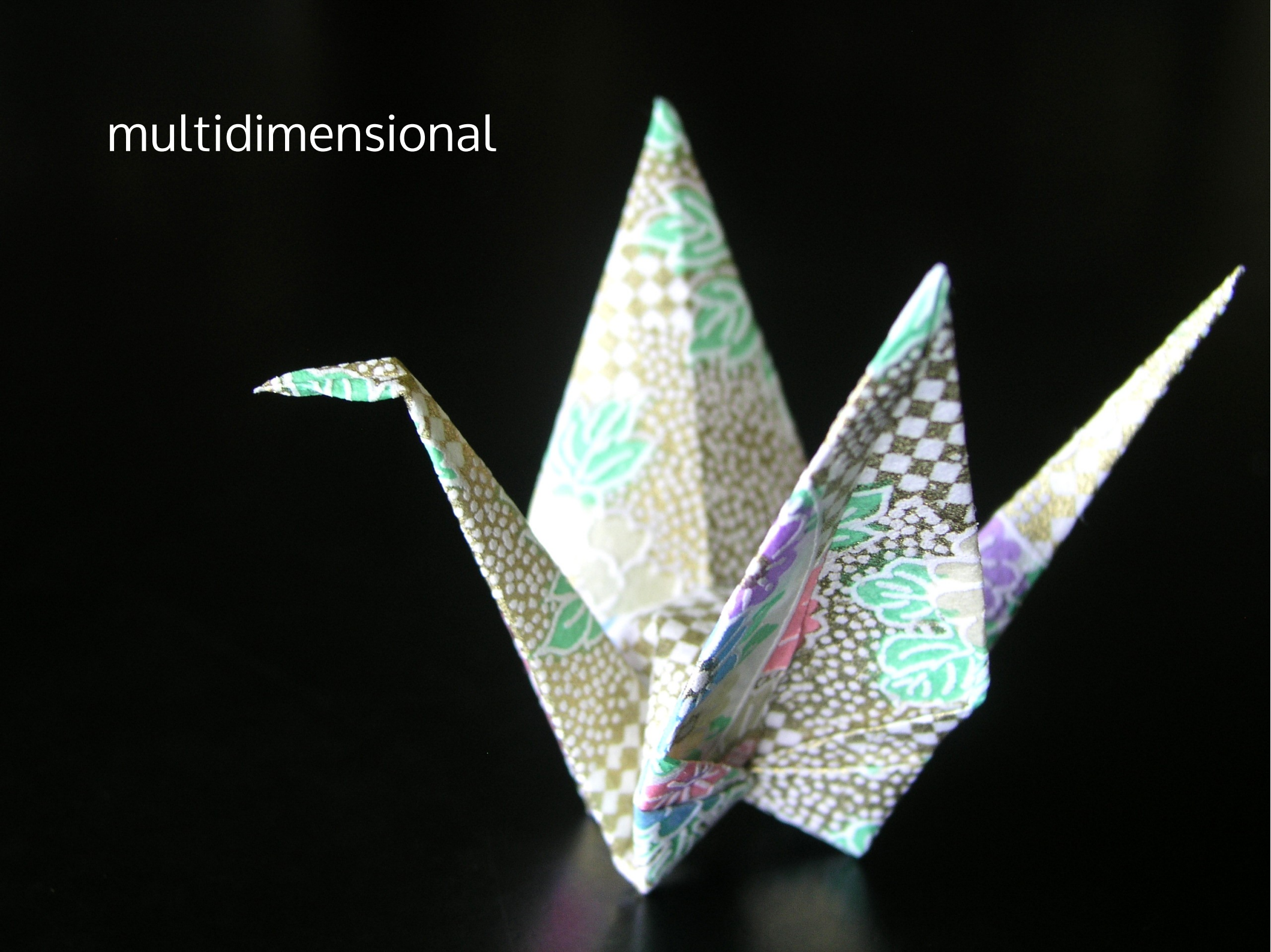
Go is ...



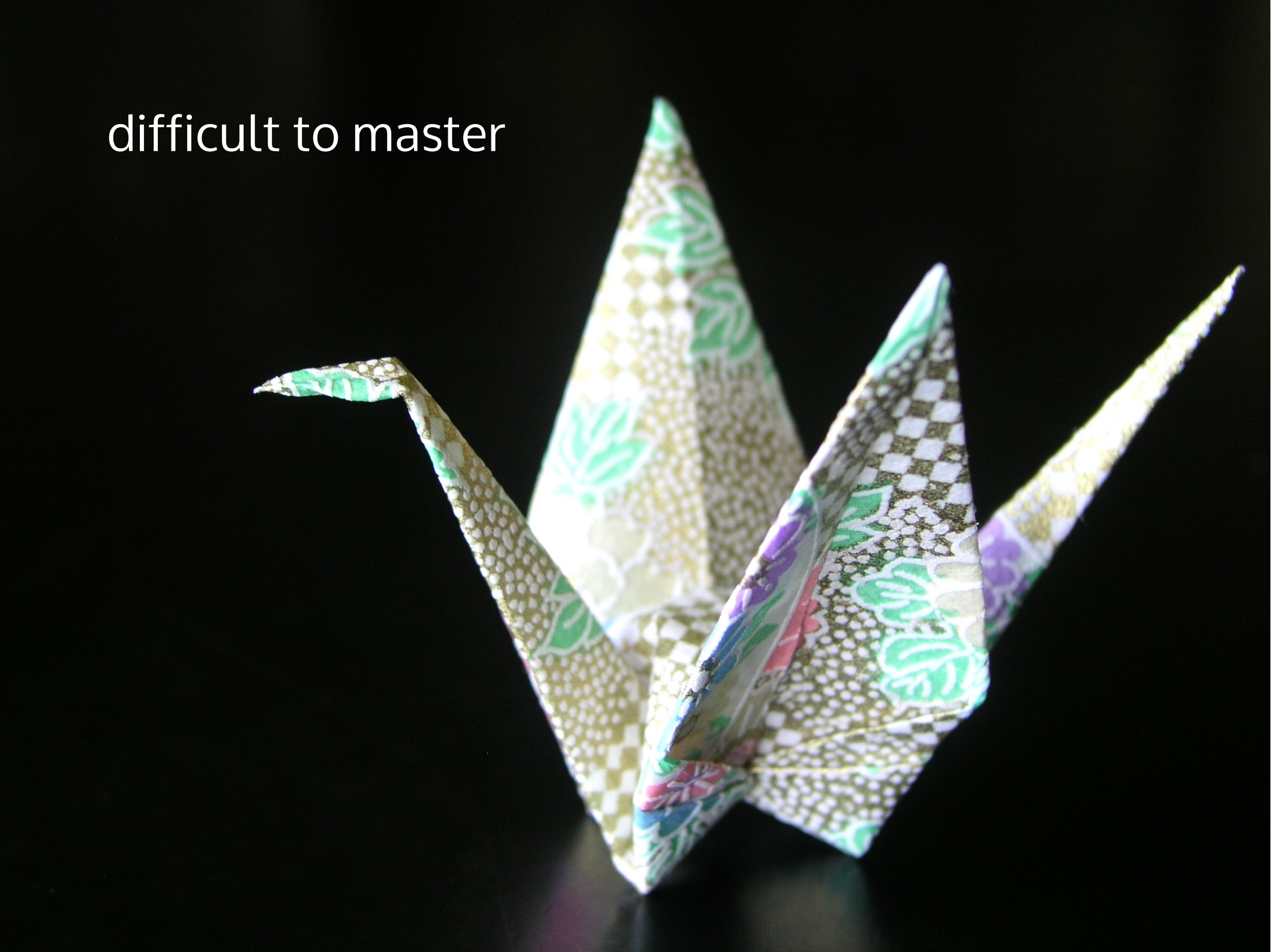
simple



multidimensional



difficult to master



The Rules

Go is played with black and white stones on a 19x19 grid.

Starting with Black, the players take turns either placing stones on empty intersections. Alternatively, they may pass.

Empty intersections next to a stone are called “liberties”.

Adjacent stones of the same color are “connected” and share liberties.

After placing a stone, any of the opponent's stones which have no liberties are “captured” and removed from the board.

A play is illegal if it would recreate the previous board position. This prevents infinite looping.

The game ends when both players pass consecutively.

The person who has claimed the most territory with their stones wins.

… a ramble about the nature of Go

- Graphs
- Concurrent
- Immutable state
- Garbage collection

… some great topics in common with computer science! ;)

Tactical *and* Strategic

Local *and* Global

… a big picture built of small pieces

- What sort of whole do the pieces create ?
- Is our attention focused on the right local challenges?
- After this, what comes next?

Software design gets away from us

when we only see the pieces, or only see the whole.

… a local node in a big world

- Does it present a consumable interface?
- Is it composable?
- Is it concurrent, scalable, federated, … ?

When we focus only on meeting the requirements in front of us, we risk creating dead-end technology.

... advocates the tools used

- Do we consider the impact of tooling choices beyond our own projects?
- Will our software help others choose great technology?
- Are we supporting technology that supports freedom?

When we design software

we are making decisions for others, picking winners and losers.

Our choices define how awesome the global state of technology will be.

Simplicity that takes a lifetime to master

Try a new BIG thing every year.

Expose yourself to other people's ideas.

Use what you learn.