



**CPS: Medium 1740047: Distorting the adversary's view:
a CPS approach to privacy and security
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One example of our work:

Challenge:

- A fully autonomous vehicle should be able to fast and reliably self localize even in GPS-denied environments

Solution:

- Use sensors to detect landmarks
- Use groups sequences of commonly available landmarks as codewords



Scientific Impact:

- New connection between coding theory and localization
- Code Hamming distance translates to error correction/probabilistic guarantees

Broader Impact:

- Increased security and reliability of autonomous vehicles

Overall Project Broader Impact:

More than 30 top-tier publications on security/privacy