

Signs in Sight: Sign-language Interpreter (SiSSI)

2025 Cyber Physical Systems Summer School, Alghero Creative Lab Pitch

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Vision: In-Lense Intelligence

- Recognize
- Ask anything
- Real-time translation





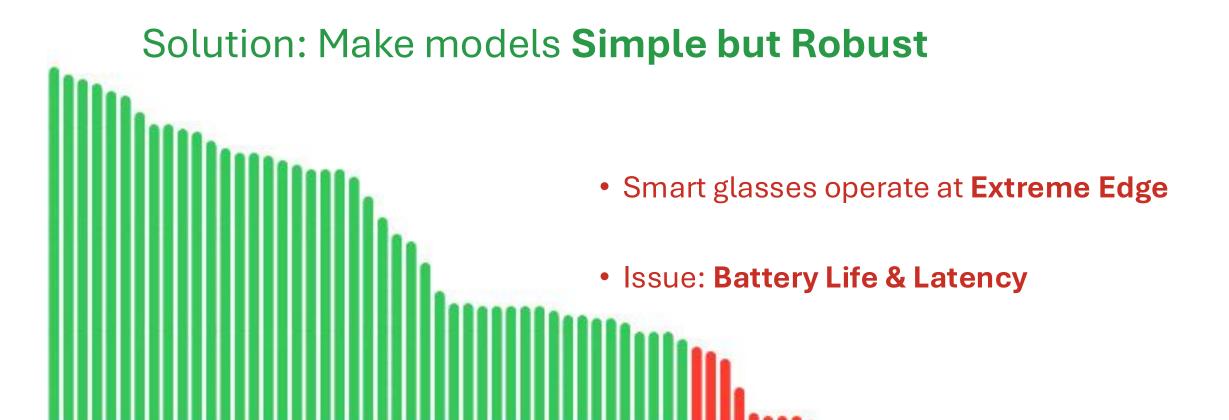
How to use live translation on Al glasses

★ 1019 likes Updated: a week ago

- Existing On-Display Translation: French, Italian, Spanish, English
- Our Vision: Integrated Support for Sign Language

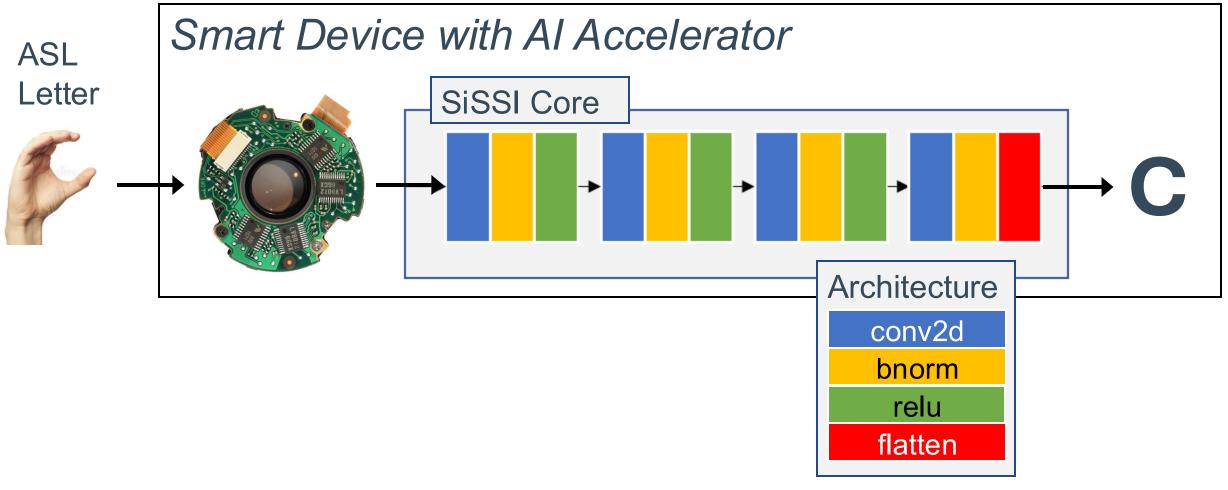
Blind Spots: Power & Energy





SiSSI At A Glance





SiSSI At A Glance

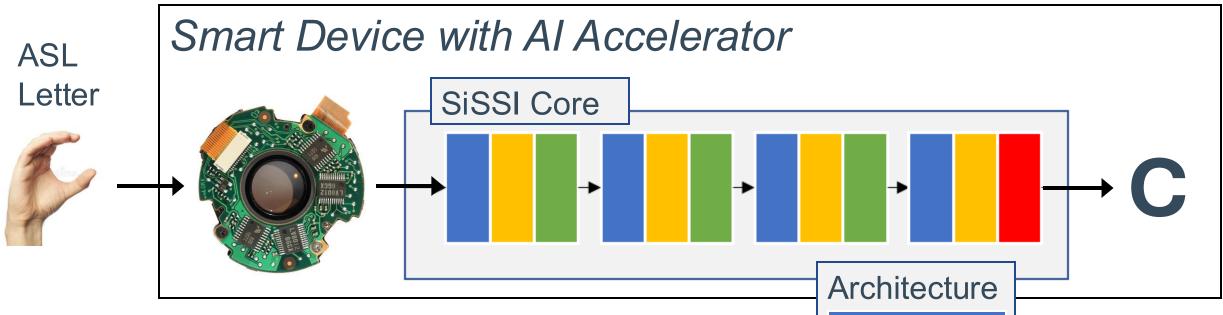


conv2d

bnorm

relu

flatten



- CNN with 0.8M parameters;
- Quantized via PTQ to 8-bit INT for fast inference;
- ~89% of accuracy.



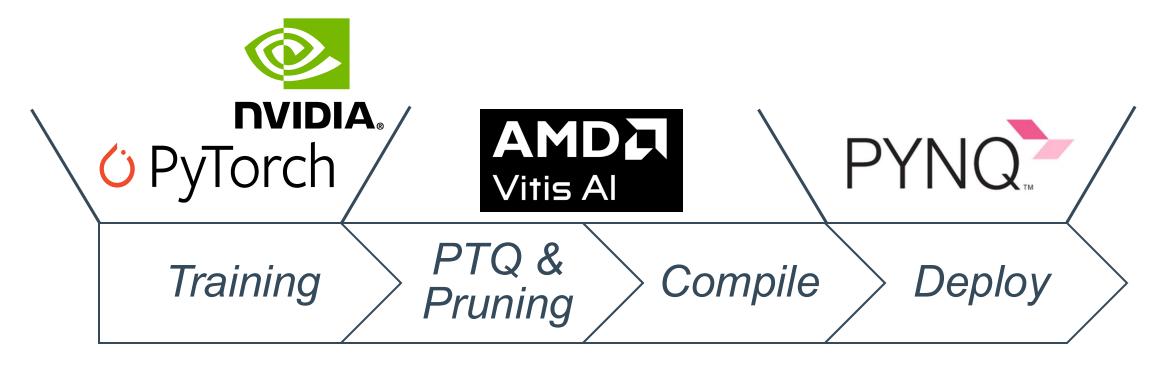
Small steps spark great journeys

Future Perspective:

- **Recognition:** Letters → Words
- Dataset Expansion: Sign Language relies on motion
- Demonstration: Hook to Meta Al App on existing smart glasses

Workflow







DEMO: Let's try it!





Have a look to our GitHub repo and leave a star;)