VITALSIGNS:
A NOVEL WRISTBAND FOR LOW-COST HEALTH MONITORING

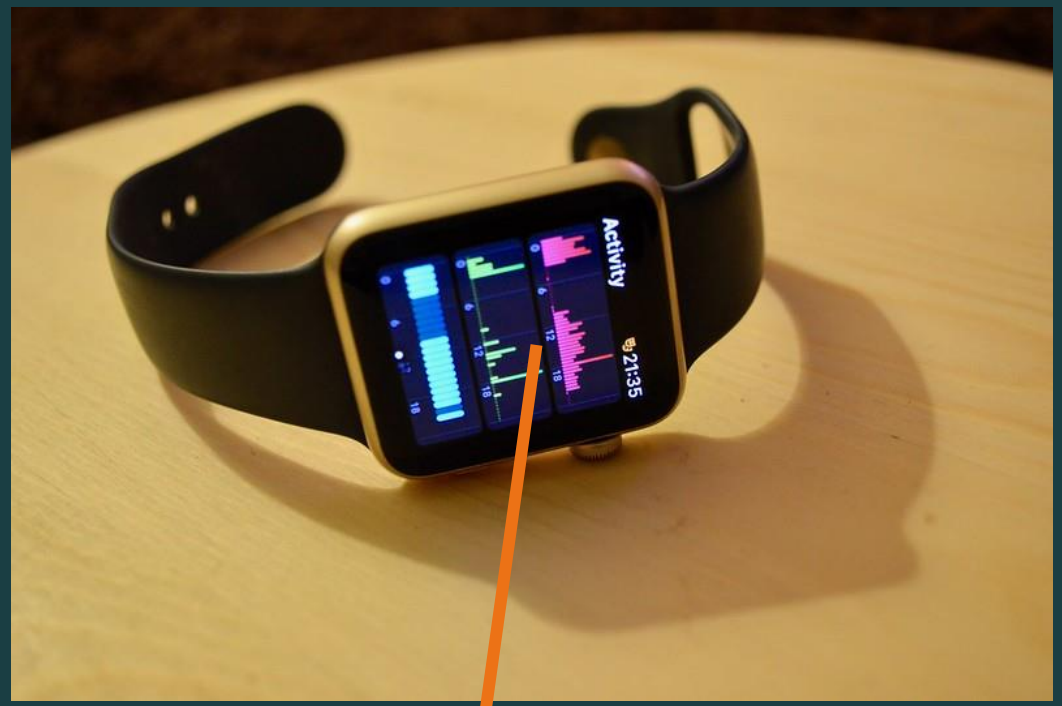
Team 1 – Engineers of Burnout

MOTIVATIONS

- Not easy to access immediate medical supports in rural areas
- Sophisticated devices not affordable

- Provide affordable urgent medical support for rural areas
- Increase the survival rate when emergent events happened

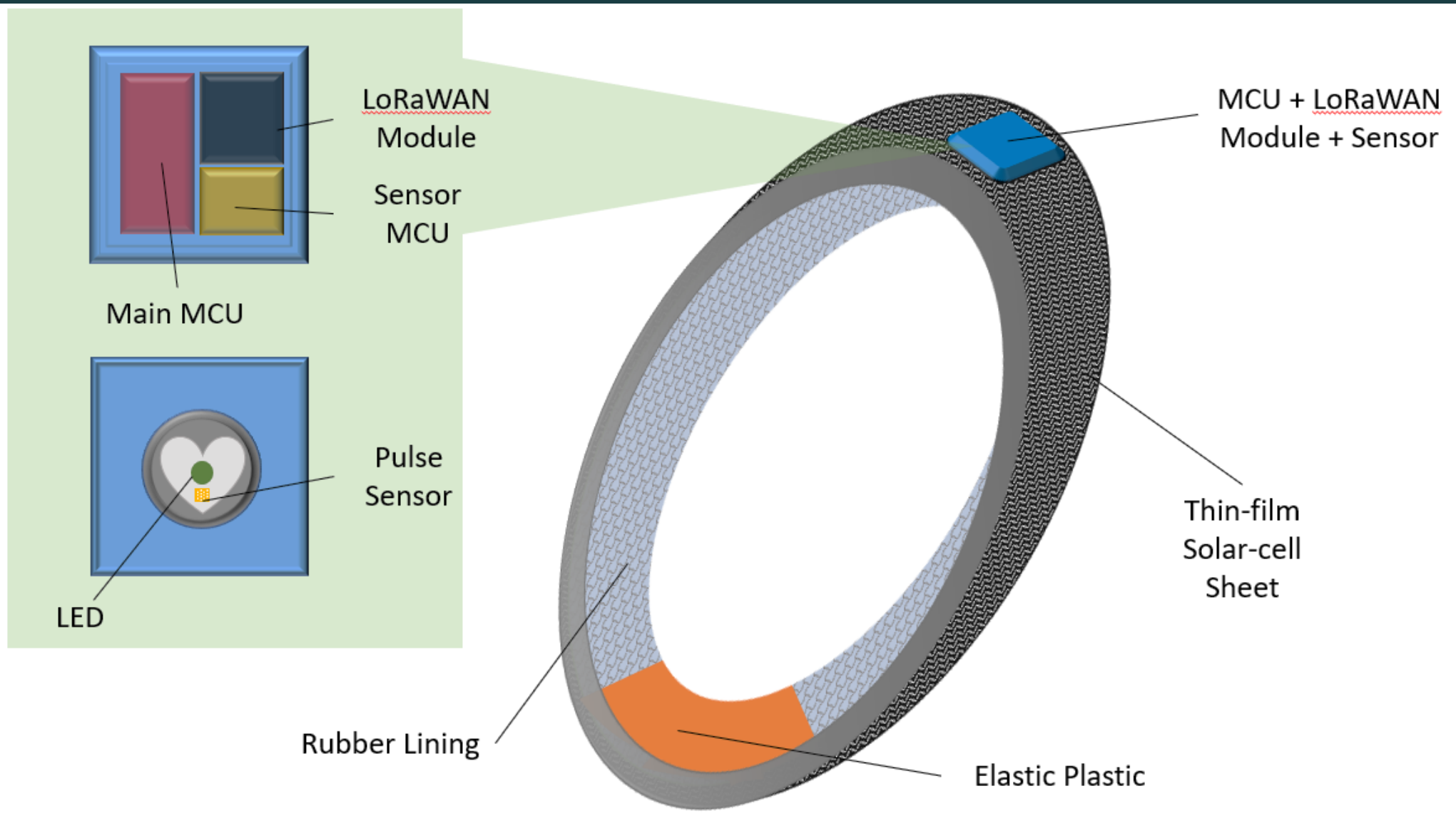
PROBLEM SCENARIO



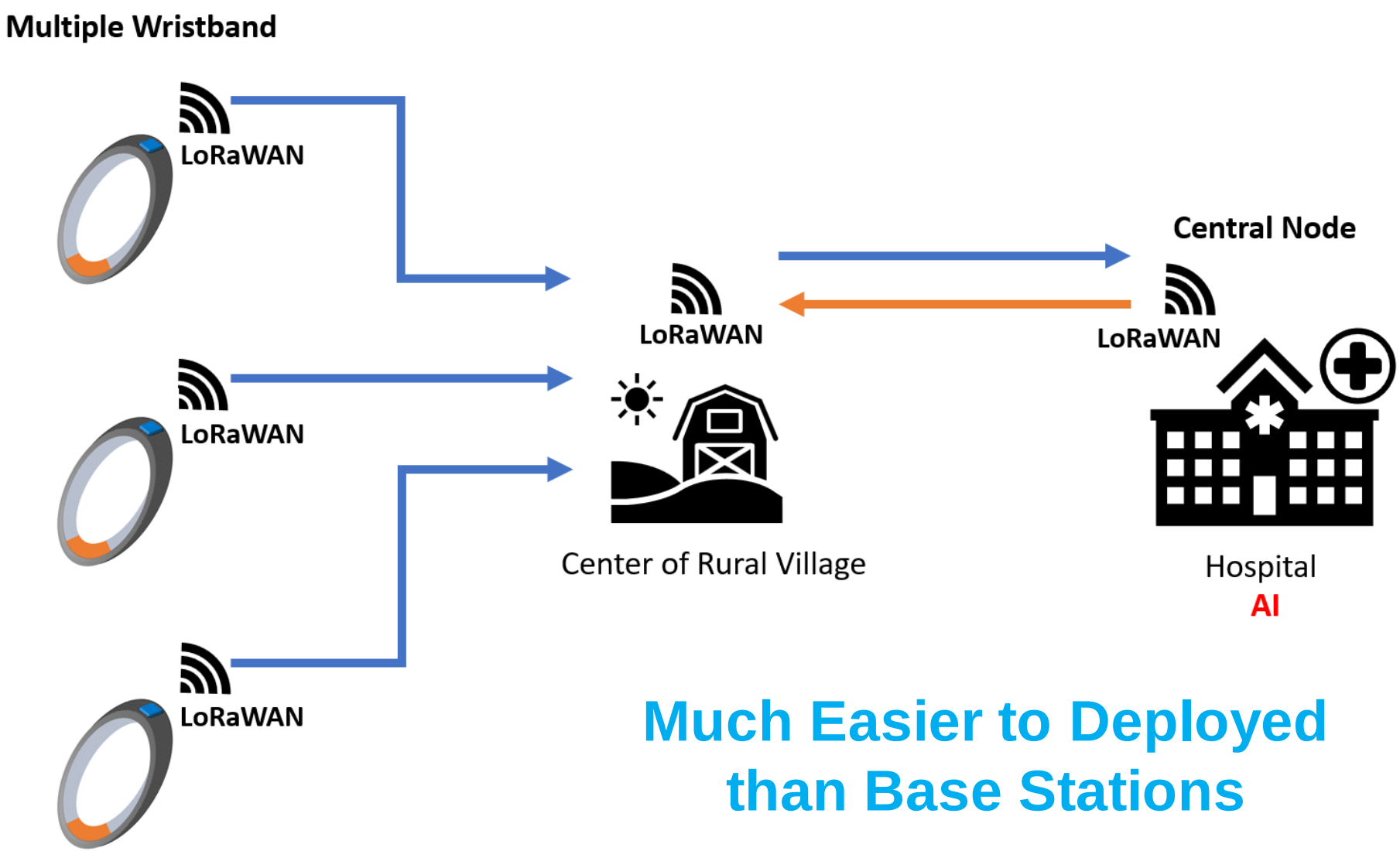
- Expensive
- Bulky

- Affordable
- Robust

Battery & Screen Removed



PROPOSED PRODUCT



NETWORK DIAGRAM

```
Training Model XGB
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Training Accuracy: 0.99971
Testing Accuracy: 0.99971
Testing Confusion Matrix:
[[19973    22     5     0     0]
 [    0 20000     0     0     0]
 [    2     0 19998     0     0]
 [    0     0     0 20000     0]
 [    0     0     0     0 20000]]
Recall Score :  0.99971
Precision Score :  0.99971
Testing F-1: 0.99971
Testing F-Beta: 0.99971
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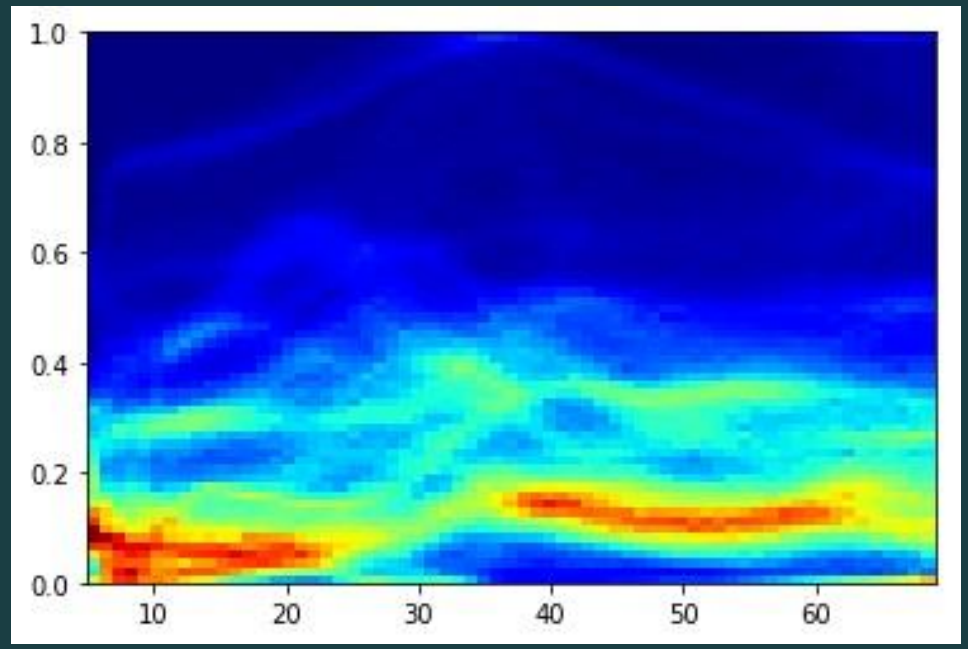
- XGBoost: AI Training Algorithm
- MIT-BIH Arrhythmia Database



TRAINING RESULTS OF AI SYSTEM

PRODUCT FEATURES

Affordable Cost

Each Wristband costs less than $10 USD in prototype

Robust

Bend-tolerant
Waterproof
Easy Maintenance

Flexible & Smart

Suitable for both Emergent Response & Long-term Evaluation

THANK YOU