
intel AI
SOLVE FOR h
LEVERAGING AI TO SOLVE PROBLEMS FOR HUMAN KIND
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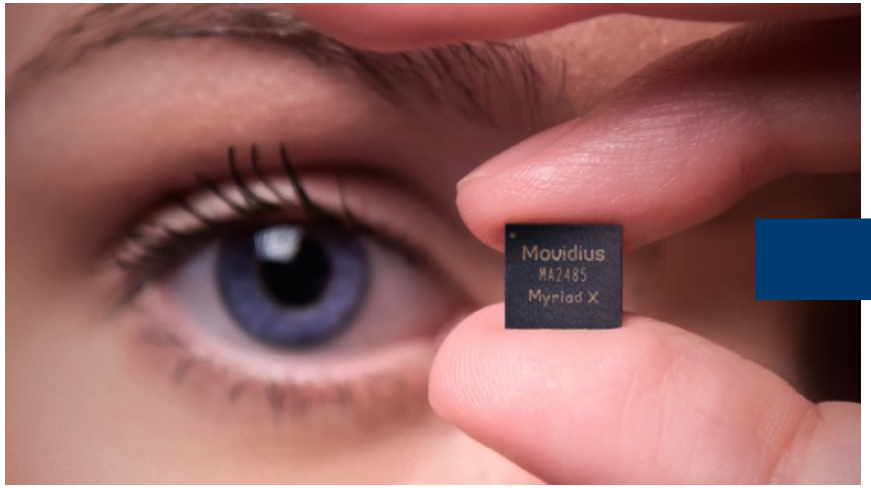
Shift from optimizing AI solutions to solving humankind's largest problems

- Work with partners to identify needs and solutions
- Reuse existing AI hardware and software
- One little chip – three big causes



1. Detecting clean water
2. Analyzing whale health
3. Detecting poachers

INTEL® NEURAL COMPUTE STICK 2

Powered by

Intel® Movidius™ Myriad™ X VPU delivers exceptional performance

Optimized by OpenVINO™

Intel® Distribution of OpenVINO™ toolkit accelerates solution development and streamlines deployment

MORE CORES. MORE AI INFERENCE.

- ✓ Start quickly with plug-and-play simplicity
- ✓ Develop on common frameworks and out-of-box sample applications
- ✓ Prototype on any platform with a USB port
- ✓ Operate without cloud compute dependence

CLEANWATER.AI

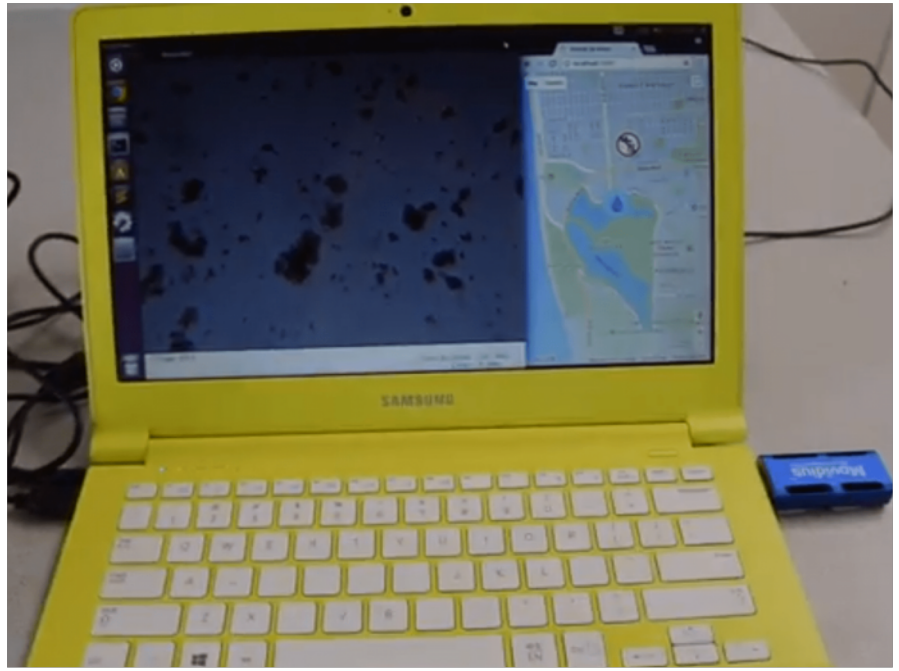
Problem

- Every minute a newborn dies from infection caused by lack of safe water and an unclean environment[1]
- Current systems are expensive and require manual analysis

Solution

- The Intel® Movidius™ Neural Compute Stick accelerates inference for offline, real-time analysis
- Full prototype system costs around $500
- Supported through the Intel® Software Innovator Program

LOW-COST, RAPID BACTERIA IDENTIFICATION MORE THAN 95% ACCURATE



SNOTBOT

Problem

- Marine life face a growing number of challenges and dangers
- To protect them, we need to understand what's threatening their ecosystem

Solution

- The Intel® Falcon™ 8+ drones captures a whale blow sample and imagery to allow researchers Parlay for the Oceans and the University of Alaska to determine whale health
- Intel® Movidius™ Neural Compute enables real-time whale identification on board

INTEL® AI AND DRONE TECHNOLOGY ADVANCING WHALE HEALTH RESEARCH

TRAILGAURD AI

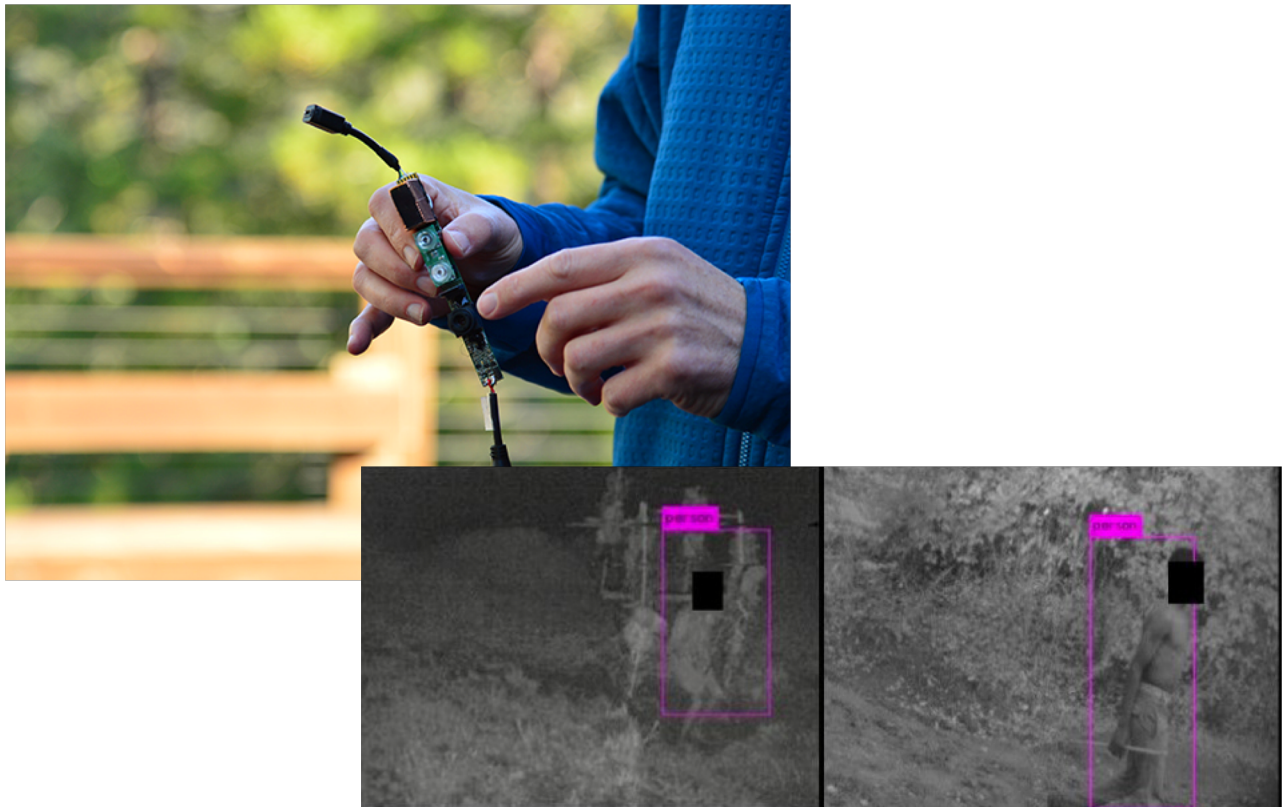
Problem

- An elephant is poached every 15 minutes, a rate of 35,000 a year
- A small number of park rangers protect a massive area
- Motion capture cameras are quite noisy, and battery life can be short

Solution

- Intel® Movidius™ VPU for image processing, running deep neural network algorithms for object detection
- Park Rangers are sent an image, with bounding box with probabilities if a person or vehicle is detected

MOTION CAMERAS WITH INTEL® VPU ENABLING CONSERVATION EFFORTS



MAXIMIZING MOBILITY

Problem

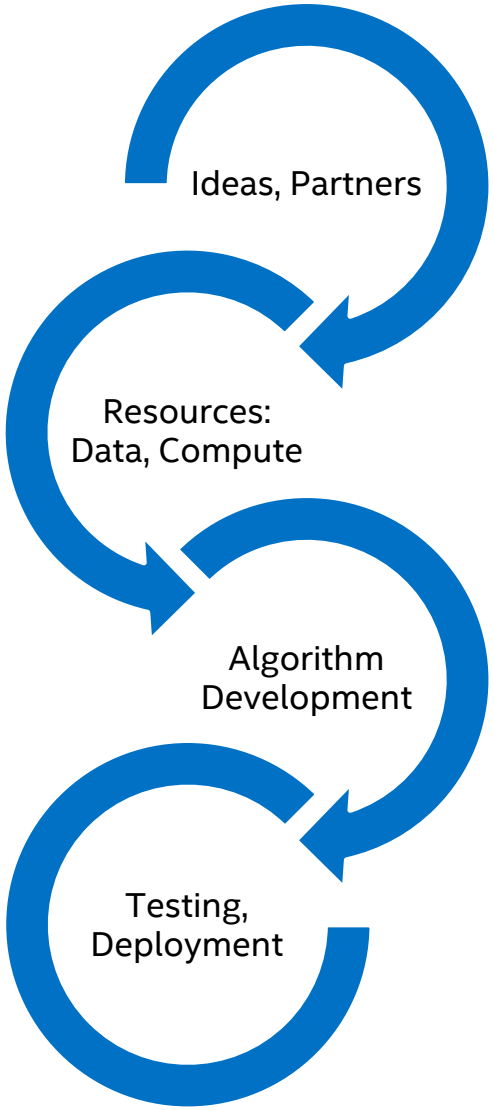
- 250,000-500,000 people around the world suffer spinal cord injuries each year
- Current mobility devices for SCI are expensive, complex, and difficult to utilize

Solution

- HOOBOX Robotics' Wheelie 7 lets users choose their most comfortable facial expressions to command a motorized wheelchair
- System combines facial gesture recognition, the Intel® 3D RealSense™ Depth Camera, the OpenVino™ Toolkit, and Intel® NUC
- Supported through the Intel® Software Innovator and AI Builders programs

ADVANCE MOBILITY AND ACCESSIBILITY THROUGH FACIAL GESTURE RECOGNITION

GETTING STARTED



Inspiration, project examples

- intel.ai/ai4socialgood

AI Academy, Software Innovators Program

- software.intel.com/en-us/ai-academy/ambassadors
- software.intel.com/en-us/intel-software-innovators

Open Source software

- intel.ai, software.intel.com

AI Builders

- builders.intel.com/ai

SAMPLE OF SOCIAL GOOD VOLUNTEER ORGANIZATIONS

Volunteer Groups

- Delta Analytics
- DataKind
- Data for Democracy
- Code for America
- Visualization for Good

Hackathon/Challenges

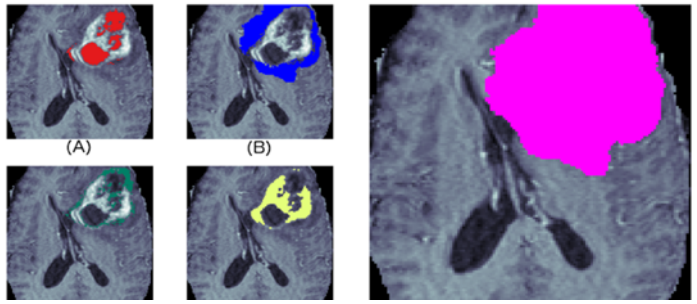
- DrivenData
- Bayesian Impact
- Kaggle Data Science for Good

Organizations

- Partnership of AI
- AI for Good Foundation
- AI4All

ADDITIONAL PROJECTS

Healthcare: Tumor Detection

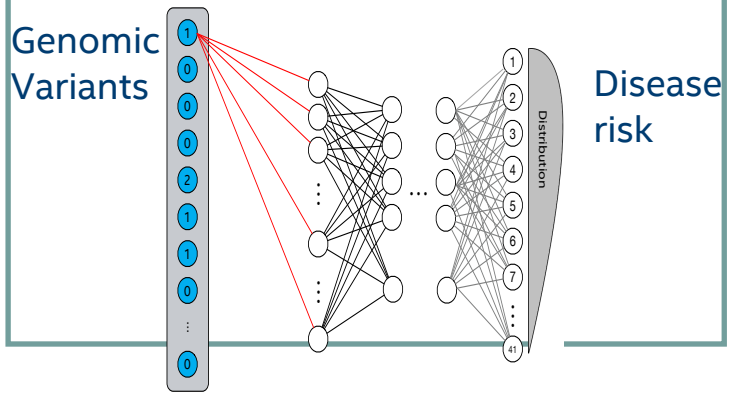


Earth: Great Wall Restoration

People: Protecting Children

NATIONAL CENTER FOR MISSING & EXPLOITED CHILDREN®
www.missingkids.com

Healthcare: Genomic Disease Risk



Earth: Disaster Response

People: Internet Safety

#HACK HARASSMENT