Brian.Hagerty.US @ ieee.org

Chair of Educational Activities

IEEE Region 6

www.meetup.com/IEEE-Education

"Majors" Programs:

College & University Education

& Continuing Professional Development

"Minors" Programs:

K-12/STEM/CTE

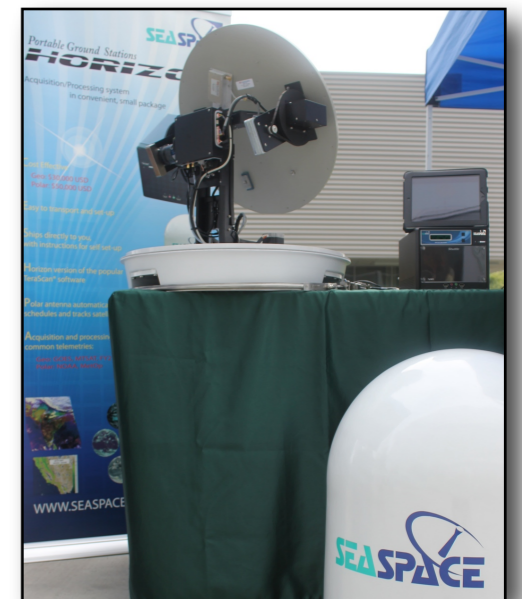**Youth Education & Community Programs**

Educational Activities, 2014-2015

KSEA Korean-America Sci/Eng Asc.

IEEE "Hack UCI" w Student Chapter;

Kid 2.0 @ UC Irvine

K-8 Astounding Inventions @ IVC

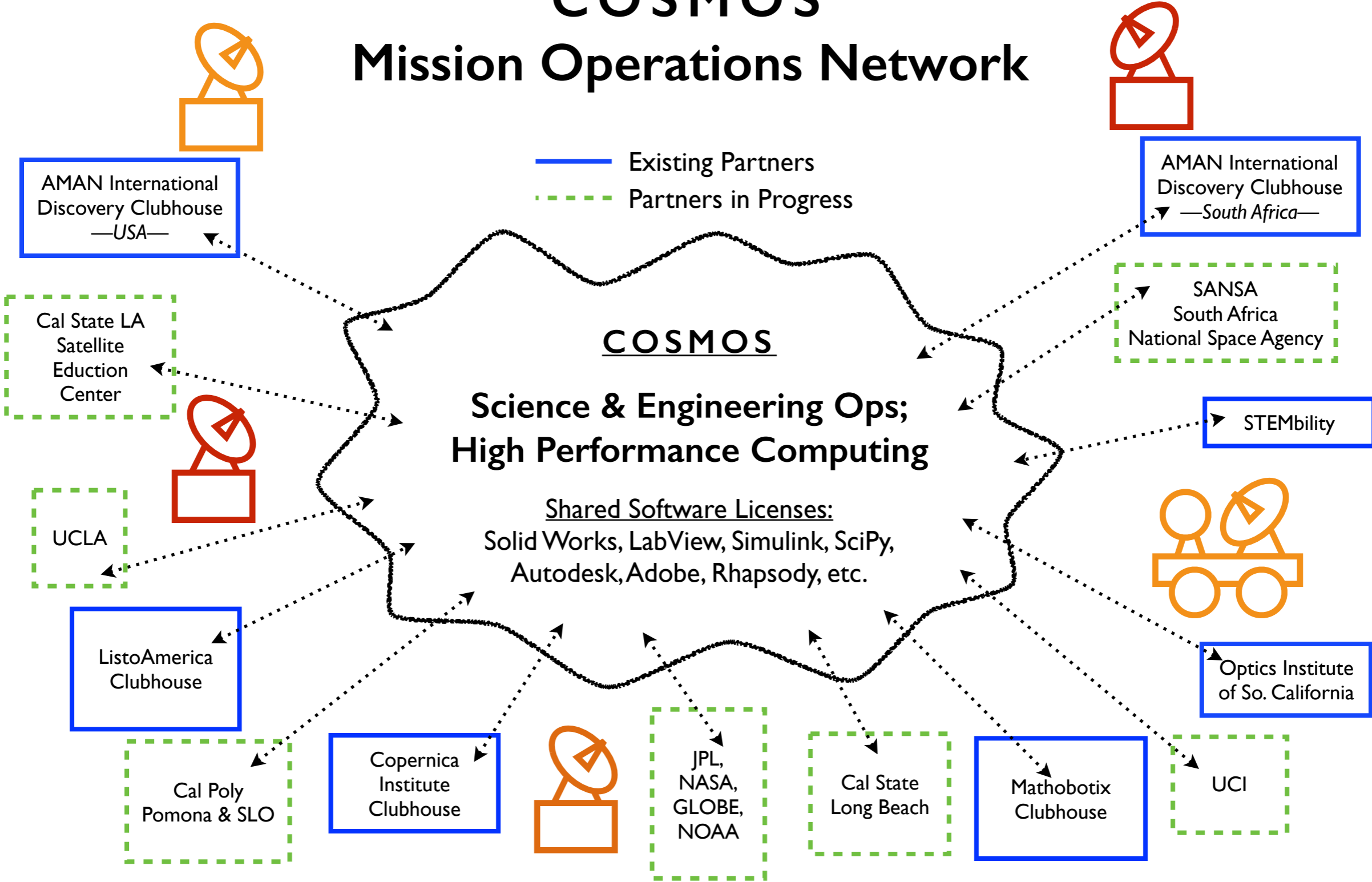FIRST LEGO League

Anaheim Conv. Center

STEM Showcase @ OC Fairgrounds

Satellite Educators Conference @ CSULA

IEEE Family BBQ & Exhibits @ ATEP

A-MAN Discovery Center

Copernica Institute

Listo America / ICCN

Mathobotix

Science@OC

Vital Link OC

COSMOS
Mission Operations Network

Existing Partners
Partners in Progress

AMAN International Discovery Clubhouse —*USA*—

AMAN International Discovery Clubhouse —*South Africa*—

Cal State LA Satellite Eduction Center

SANSA South Africa National Space Agency

COSMOS

Science & Engineering Ops; High Performance Computing

Shared Software Licenses:
Solid Works, LabView, Simulink, SciPy, Autodesk, Adobe, Rhapsody, etc.

STEMbility

UCLA

ListoAmerica Clubhouse

Optics Institute of So. California

Cal Poly Pomona & SLO

Copernica Institute Clubhouse

JPL, NASA, GLOBE, NOAA

Cal State Long Beach

Mathobotix Clubhouse

UCI

Educational Activities, 2015-2016

—>> *Strategic Initiatives* —>>

IEEE Tool Box Training Initiative:

Buy Shared HW/SW/Cloud Tools for Region/Area/Section/Chapter;

Matlab, Simulink, LabView, Rhapsody, SPICE, Zemax, Mentor, COMSOL …

Arduino, Beagle Board, Edison, Galileo, Raspberry Pi …

Including Open-Source Software, Ubuntu, SciPy, Enthought, LTS …

IEEE-sponsored "Majors" & "Minors" Technology Clubhouses:

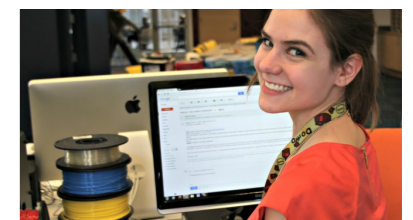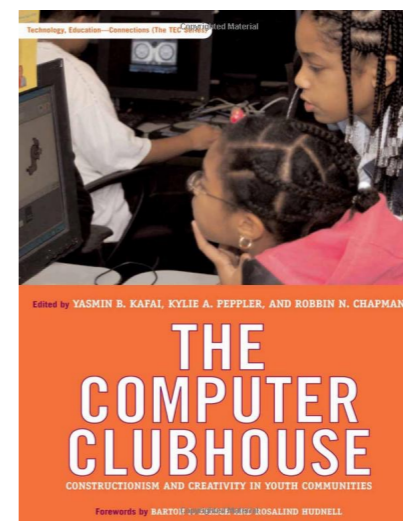**Shared Tools, Technology, Training**

Project-Based Co-Learning

Mentors & Members Model:

"Minors" learn from "Majors"

"Majors" learn from Seniors

Educational Activities, 2015-2016

—>> *Strategic Initiatives* —>>

IEEE-Sponsored Workshops, Conferences & Credentials:

+> CyberSecurity, Information Assurance & Privacy Engineering

Cal Poly Pomona NSA Center of Excellence for Cyber Education

Workshops on Secure Embedded Computing; "Smart" Grids, Cities, etc.

+> ESTE: Environmental Science, Technology & Engineering

Co-sponsored with NOAA, GLOBE, AEE, and others

Natural & Built Environments: Hydro, Renewables, Fuels, Grid, Buildings

+> PICAA: Professional & Industrial Credentialing & Accred'n Asc.

Prior Learning Assessments; Badging & Stackable Credentials

Industrial Bachelors, Masters; M.B.Eng, D.Eng.

IEEE Scholars Program; Career Technical Education

+> IEEE "Scholars" Program: NSF Grants, DOE, ASD, etc.

+> IEEE "Scholarship Plus"; like IEEE PES

+> IEEE "Council on Career Technical Education"

+> IEEE "ApprenticeMakers"

Apprenticemakers