# Patrick A. Hillberg Ph.D.

SPEAKER, AUTHOR, PROFESSOR

Interests: Sustainable Product Lifecycles and Workforce Development

pahillbe@oakland.edu
patrick\_hillberg@outlook.com
linkedin.com/in/patrickhillberg/

For MUCH more info, see: patrickhillberg.com

Residence: Birmingham, MI

# Education

Ph.D. Systems Engineering, Oakland University

M.S.E. Industrial & Systems Engineering, University of Michigan

B.S. Computer Science, Michigan Technological University

# Biography

As speaker, author, and professor, Pat addresses sustainability, systems thinking and organizational dysfunction; the absence of which inhibits innovation, leads to scandalous products, and diminishes the earth's habitability.

He has decades of experience in designing, developing and leading teams in Product Lifecycle Management (PLM), Digitalization, and Advanced Manufacturing in many industries.

He is passionate about developing a workforce for the 4<sup>th</sup> Industrial Revolution, collaborates with industry, academia, and workforce organizations to develop talent management strategies, and advises education and workforce committees.

## Recent Roles

## 2012 - Present

Adjunct Professor, Oakland University, Rochester, MI

- Created and teaches the course "Product Lifecycle Management" to graduate level engineering managers. Mentors past graduates.
- Member: OU ISE Industry Advisory Board

## 2011 - 2019

Siemens PLM (Simultaneous with Oakland University)

- U.S. Lead: Academic and Workforce Development. Created strategies to develop the skillsets needed for our customer's workforces.
- Lead Architect: Led teams in Teamcenter implementations, with a focus on the implied need for organizational change.

#### Prior

- Data Architect Dassault Systems DELMIA (2004-2010)
- Ph.D. Research Fellow; Oakland University (2001-2004)
- Vision-Guided Robotics; FANUC Robotics (1997 2001)

# Recent Industry Experience

## Siemens Digital Industries Software

**Solution Architect/Project Manager:** Design, develop and lead teams in Product Lifecycle Management (PLM), Digital Manufacturing, Process Planning, Robotics and Machine Vision applications in Aerospace, Shipbuilding, Automotive, Construction, Packaging and other industries.

**Activities:** Frequent public speaker on topics related to PLM and developing the STEM workforce. Formal and informal advisor to education efforts at Universities, Colleges, and STEM groups.

**Methodologies:** Systems Thinking and Organizational Learning. Educate and support students and team members to be competent and empowered to make good decisions.

## 2019 -2017

**Academic and Workforce Development Lead** 

## Mission

 U.S. Academic Sales Team; developed strategies for supporting schools in use of Siemens tools

#### **Achievements**

- Increased academic awareness of Siemens education offerings through presentations and conferences
- Academic liaison to the US Manufacturing Institutes. Initiated relationship to LIFT in Detroit.

## 2016 -2014

**Lead Solution Architect** 

**Client: Robotic Assembly Line Builder** 

## Mission

 Global Solution Lead for an international Automotive and Aerospace Robotics Line Builder

## **Achievements**

- Built a €30M project based on the PLM vision also taught in class
- Gained control of a highly dysfunctional project;
   led Siemens team of 12 people, as well as a customer team of 40
- Early delivery of Teamcenter Phase 1 Go Live after 8 months using Scrum
- Point of Contact to C-level executives
- My Siemens team won "Best Project Execution" award in 2017
- Mentored my customer POC, who has since converted his career to PLM leadership.

## 2014 (6 months)

## **Lead Presales Architect**

## **Client: Micro-electronics Manufacturer**

## Mission

• Architectural leadership in attempt to recover a failed project

#### Achievements

- Persuaded unhappy customer to re-engage in conversation about how PLM could be a viable/valuable methodology for use in their business
- Engaged groups to understand business needs; suggested more efficient processes.
- Led final presentation to executive staff.
- Effort ultimately failed, but for me it reinforced that digital transformation is an exercise in culture change

2013 -2012 Scrum Master/Team Lead Client: Large Naval Shipbuilder

## Missions

- Team Lead, Engineering Change Management developed vision and presented customer demonstrations (30+ people). Primary POC with customer team.
- Overall Teamcenter Scrum Master, leading four scrum teams

#### Achievements

- High marks from top-ranking customer at demos, helping her develop confidence in Tc Change Management. She became a strong supporter.
- Encouraged customer representatives to take lead role in the demos, rather than Siemens team "proving that it works". This became quite important in creating cultural acceptance for this new technology product. Made great use of this experience in later projects, and in my teaching.