AI Practioners: On the Northeast Ohio ACM

Cameron Hughes (Northeast Ohio ACM Chair; cameronhughes@acm.org)

About NEOACM Chapter

I am currently the chair of NEOACM (Northeast Ohio ACM), a professional chapter of the ACM, located in the state of Ohio in the U.S. founded in 2008. NEOACM is quickly coming up on its 10th anniversary. Our chapter, like most, is dedicated to advancing the art, science, engineering, and application of information technology, serving both professional and public interests. We accomplish much of our mission by hosting workshops, speakers, and panel discussions that are open to the public. In my capacity as chair, I have had the opportunity to influence the direction of some of the workshops and panel discussions that we host. I've always had a predilection for most things AI and I'm particularly interested in how the descriptions of embedded AI technologies are worded when those technologies are integral to goods and services targeted toward the average citizen or general public. Sure as insiders we throw around phrases like computational linguistics, particle swarm optimization, machine learning, domain ontologies, agent-oriented architectures, etc. all the time because its normal vernacular. But we know in most instances our techno-speak will need to be translated into terminology that's more consumer-oriented once commercial applications start to be generated. It's the gap that I worry about. The translation from artificial intelligence, computer science, and mathematics specific terminology into descriptions that the average citizen will end up trying to grapple with. For instance:

- What does "smart car" really mean?
- What makes a "smart city", smart?
- What does machine learning have to do with lowering the cost of prescriptions?
- How will AI technologies be described when they are integral to issues that are presented to voters on a ballot?

Will the promoters and politicians come up with descriptions of AI technologies that are

accurate, informative, and easy to understand or will they come up with catchy phrases, market speak, slogans and buzzwords that are self-serving? So when I have a chance to suggest a workshop or a panel discussion, there is usually a component that deals with the intersection between the descriptions embedded AI technology and the public interest.

Our Fall Practical AI Panel Discussion

In fall of 2016, NEOACM hosted a panel discussion on artificial intelligence, entitled: We Come In Peace at Kent State University. In that discussion, we covered some of the many hopeful scenarios that AI has to offer and will provide in the future, but we also discussed the challenges that have to be met. The panel discussion was entitled, "We Come In Peace." The phrase: "We Come in Peace" means "having no hostile intent." It is a phrase stereotypically used in science fiction narratives by extraterrestrial visitors upon first meeting the inhabitants of a planet (typically earth). The first science fiction movie that used this phrase in this context was *The Day The Earth Stood Still* by Klaatu after leaving his spaceship:

We have come to visit you in peace – and with good will.

We used this phrase as the title of the discussion because the implementation of AI should "have no hostile intent" to society, the impact should be positive and of great benefit. AI has been successfully applied to a number of societys challenging problems and we covered some of the successful deployments and the potential use of AI in various topics that are essential for social good. This was including but not limited to urban computing, robotics, and public welfare. But we also discussed issues of ethics, liability, safety, and control. But one of the biggest hurdles in addressing our diverse audience comprised of students and professors of computer science and non-technical disciplines, computing professionals, and a large number of average citizens, was making sure everyone had a base

understanding of the meaning of some popular AI terminology and some of the basic techniques used such as data mining, machine learning, and predictive analytics.

There were six panelists:

- **Dr. Pooyan Fazil**, AI and Human-Robot Interaction Researcher from Cleveland State University's Electrical Engineering and Computer Science Department,
- **Dr. Sven Koenig**, fellow of the AAAI (Association for the Advancement of AI),
- **Dr. Mark Vopat**, Applied Ethicists from Youngstown State University,

and three panelists from industry:

- **Paul Carlson**, an Intelligent Community Strategist, who had conducted IT transformation resulting in the City of Columbus being recognized as the 2015 "Most Intelligent Community" in the world by the Intelligent Community Foundation (ICF), achieving international status for Central Ohio,
- **Stuart Johnson**, Vice President of Connected Nation, a leading technology organization committed to assisting states, communities, families, and individuals to adopt and use improved broadband access,
- **Nicholas Wagner**, the cofounder and CTO of AvatarFleet that focuses on bringing innovative software solutions to the trucking industry.

This fall, NEOACM will host "We Come In Peace / We Come in Pieces", our 2nd Annual AI Panel Discussion at Youngstown State University. The new subtitle "We come in Pieces" will address the fact that many AI technologies are 'quietly' embedded within non AI-based technologies. Again the goal for the panel discussion will be to decode and demystify AI terminology, misnomers, and market speak. Our goal will be to help educate the public on some of the AI projects and technologies such as self-driving vehicles, cognitive computing, and smart cities that being implemented in our communities, highlighting some of real social, moral, and economic impact. We will include a discussion of how AI and autonomous systems are being considered locally to deal with water quality and early warning systems within a smart city framework. In this year's event,

we will have a demonstration of an AI application developed by a local start-up company based in Cleveland, Ohio.

Our panel this year will include:

- **Doug McCollough**, CIO of Dublin Ohio, Dublin International Institute for the Study of Intelligent Communities and the Smart Mobility Corridor, geared to bring self-driving cars to Ohio,
- **Andrew Konya**, co-founder and CEO of Remesh in Cleveland, developer of Artificial Intelligence that engages and understands large groups of people,
- **Paul Carlson**, Intelligent Community Strategist from Columbus Ohio,
- **Dr. Mark Vopat**, Technology Ethicist at Youngstown State University, and
- **Dr. Jay Ramanathan**, Humanitarian Engineering Center of Ohio State University.

Cameron Hughes is a computer and robot programmer. He holds a post as a Software Epistemologist at Ctest Laboratories, where he is currently working on A.I.M. (Alternative Intelligence for Machines) and A.I.R (Alternative Intelligence for Robots) technologies. Cameron is the lead AI Engineer for the Knowledge Group at Advanced Software Construction Inc., and a staff Programmer/Analyst at Youngstown State University. Cameron is an advisory board member for the National Robotics Education Foundation and a member of the Oak Hill Robotics Makerspace. He is the project leader of the technical team for the NEOACM CSI/CLUE Robotics Challenge and regularly directs robot programming workshops. Among other books, Cameron is the co-author of *Build Your Own Teams of Robots* (2013) and *Robot Programming: A Guide to Controlling Autonomous Robots* (2016).