IBM Blockchain Workshop at Binghamton University, October 10, 2018 Workshop 8:30 AM – 4:45 PM Mixer 5:00 – 7:00 PM

(Light Breakfast, Lunch and Open Bar with Hors D'oeuvres included

08:00-08:30	Light Breakfast
08:30-08:45	Welcome and introduction of speakers
08:45-09:45	Blockchain explained
09:45-10:15	Optional demos
10:15-10:30	Break
10:30-11:15	IBM Blockchain Platform explored
11:15-12:00	Hyperledger Composer explored (Lab introductions)
12:00-12:30	Lunch
12:30-13:00	Lab 1: Vehicle Lifecycle
13:00-13:30	Lab 2 Hyperledger Composer Playground
13:30-14:15	Lab 3 and 4: Hyperledger Composer Developer and Query Tutorial
14:15-15:00	Blockchain Architecture explored
15:00-15:15	Break
15:15-16:00	Hyperledger Fabric explored
16:00-16:15	IBM Blockchain engagement next steps
16:15-16:45	Hyperledger Fabric development lab (optional)
17:00 - 19:00	MIXER: Open Bar and Hors D'oeuvres

INSTRUCTOR BIOGRAPHIES

Dr. Ben Amaba: PE, CPIM®, LEED® AP Chief Innovation Officer for the Industrial Sector IBM Watson and Cloud Division



Dr. Amaba is the Chief Innovation Officer for the Industrial Sector, IBM Watson and Cloud Division – North America. He is responsible for industrial manufacturing, infrastructure and logistics solutions for supply chain management, systems design, operations, sustainability, and ergonomics. He speaks and publishes globally on Blockchain, software engineering, artificial intelligence, data analytics, Internet of Things and cloud technology. Dr. Ben Amaba holds a PhD. degree in Industrial & Systems Engineering, a M.B.A./M.S. degree in Engineering and Operations, and a B.S. degree in Electrical Engineering. Dr. Amaba is a registered and licensed Professional Engineer in several states with International Registry; certified in

Production, Operations, and Inventory Management by APICS ®; LEED® Accredited Professional (Leadership in Energy & Environmental Design); and certified in Corporate Strategy by Massachusetts Institute of Technology in Cambridge, Massachusetts. Dr. Amaba holds a copyright for Process Activity Flow Framework®, the foundation for IBM's Business Driven Development framework for requirements, design, architecture, simulation, and application development techniques. Dr. Amaba has been a keynote in major professional and industry conferences around the world for the past 30 years, is prominently featured in "Giving 2.0," by Laura Arrillaga-Andreessen with Stanford Business School, which details contributions to bolster and promote STEM education and careers, and is an Alexis de Tocqueville Society/United Way Member, which recognizes local philanthropic leaders.

Dennis Miller: Watson and Cloud Platform Technical Specialist North America Industrial Sector Blockchain Technical Lead



Dennis Miller is a Blockchain technical lead at IBM within the industrial sector and has worked at IBM for 18 years in a variety of worldwide and regional roles with middleware solutions. As a member of a SWAT team within the industrial sector, Dennis has led hands-on workshops for Blockchain solutions based on the IBM Blockchain Platform as well as demonstrations, proof of concepts and workshops for API Economy solutions. Dennis has over 30 years' experience as a software developer, architect, project manager, consultant, and team lead for information technology solutions. Dennis has extensive manufacturing systems experience developing and implementing custom material requirements planning systems,

inventory cost and procurement systems, and factory floor systems. Dennis architected, developed, and implemented factory floor systems including material movement control systems, cell control systems, factory network messaging backbones, storage controller systems and data acquisition systems to facilitate the collection of production data, schedules, and reporting. Prior to IBM, Dennis worked as a I/T architect and developer at Caterpillar, Inc leading major technology initiatives and as a chief architect and developer at Digital Equipment Corporation Consulting Services developing custom mission critical factory floor systems. Dennis earned both graduate and undergraduate degrees from Bradley University with an MBA and a BS in Computer Information System.

Zach Miller: Technical Specialist, Watson and Cloud Platform Industrial Sector Blockchain



Zach Miller holds Software Engineering and Multimedia Journalism degrees from the University of Texas. With bachelor's degrees in communications and computer science, he brings a unique skillset to any task he undertakes—being able to communicate a new topic broadly and being able chop a large task down into smaller, manageable tasks. His skills and interests are in Blockchain, Natural Language Processing, Artificial Intelligence and Containerization. Before joining IBM in 2017, Zach had many previous roles that have formed him professionally and personally, most notably photographing for an NGO benefiting women and children in rural Ethiopia and being a government beat reporter in the Texas hill country. Although he has grown accustomed to city life, East Texas will always be home. In his free time, Zach enjoys sipping espresso, painting, photography,

playing music and whistling a tune.

Bret Bailey: Client Advocate for the Industrial Market for the Global Solution Center



Bret Bailey is an IT Specialist and Sales Lead for the Aerospace & Defense, Automotive, Chemical & Petroleum, Electronics, and Industrial Products Industries. He has a Bachelor of Science in Computer Science and Master's degree in Business. Bret has over 40 years of experience in IT across multiple business sectors and 21 years in IBM. His current areas of expertise are in the Internet of Things (IoT), Cloud Computing, AI and Blockchain space.