

## Digital divide among UK business is holding back the economy

**ARMONK, N.Y. - 14 Apr 2016:** IBM (NYSE: [IBM](#)) today named 11 new [IBM Fellows](#), the company's most prestigious technical honor. The new Fellows are being honored for pioneering work in areas including cognitive computing, analytics, cloud, security, mobile and healthcare. As Fellows, these individuals will have the opportunity to dedicate significant time to free-form exploration and innovation in their areas of expertise.

*IBM today named 11 new IBM Fellows, the company's most prestigious technical honor. The new Fellows are being honored for pioneering work in areas including cognitive computing, analytics, cloud, security, mobile and healthcare. Pictured from left to right are the 2016 IBM Fellows: Adam Kocoloski, Ajay Royyuru, Shankar Kalyana, Tanveer Syeda-Mahmood, Mac Devine, Blaine Dolph, Gosia Steinder, Bill Kostenko, Stacy Joines, JR Rao, Salim Roukos (Credit: Jon Simon/Feature Photo Service for IBM)*

“These extraordinary men and women join a select community made up of some of the world’s most creative thinkers,” said Ginni Rometty, IBM chairman, president and CEO. “Our new IBM Fellows play a critical role in defining the next era of technology, business and society, with vital contributions to IBM’s position as the world’s leading cognitive solutions and cloud platform company.”

The IBM Fellow distinction is conferred in recognition of exceptional and sustained technical achievements and leadership in engineering, programming, services, science, technology and industry solutions. Collectively, the 11 new Fellows have 172 patents.

This year's Fellows are transforming business and society with technical advancements, developments and research. For example, Director of IBM Healthcare and Life Sciences Research Ajay Royyuru is using Watson for Genomics to translate genomic variations in cancer to treatment options. IBM's Chief Scientist for Medical Sieve Radiology Tanveer Syeda-Mahmood is developing automated, cognitive radiology and cardiology technology that is aimed at helping clinicians in their decision-making. Director of IBM Security Research JR Rao is addressing emerging challenges in security and privacy with cognitive computing, data and analytics. IBM Cloud Computing Scientist Gosia Steinder is greatly simplifying application lifecycle management with container cloud research.

Past IBM Fellows, who include a [Kyoto Prize](#) winner and five Nobel Prize winners, have fostered some of business and society's most significant breakthroughs—from the IBM Watson cognitive system, to the systems that helped put the first man on the moon, and the first instrument to image atoms.

To be awarded IBM's pre-eminent technical honor, an employee must meet four important criteria:

- Sustained innovation in some of the world's most important technologies
- Significant recognition as a leader among IBM's technical communities
- Broad industry acknowledgement of the individual's accomplishments
- A strong history of new technologies and business models being deployed at scale

The program was founded in 1962 by Thomas J. Watson, Jr. to promote creativity among the company's most exceptional technical professionals. IBM has named 278 Fellows since the program's inception. Collectively, IBM Fellows have 9,329 patents.

2016 IBM Fellows

### **Mac Devine – Cloud Computing and Internet of Things**

IBM Cloud

As Vice President and Chief Technology Officer for Networking and Innovation Services within IBM's Cloud division, Mac Devine has helped shape the company's cloud computing and Internet of Things strategies, including IBM's acquisitions of SoftLayer, Cloudant, Fiberlink, Ustream and The Weather Company. Mac is a master innovator who constantly pushes IBM into new technology areas and finds innovative ways to leverage open source and its ecosystem. As an IBM Fellow, Mac will be responsible for defining the architecture and setting the technical direction for leveraging emerging technology used for supporting hyperscale workloads. He will also focus on advanced innovations to extend IBM's presence into Edge of Network in support of Internet of Things, data-as-a-service, video services and cyber security.

### **Blaine Dolph – Apple+IBM Partnership**

IBM Global Business Services

Blaine Dolph is Chief Technology Officer of the Apple+IBM Global Partnership. He is also an IBM Master Inventor with more than 40 patents filed. Blaine has been instrumental in launching the technical strategy for several IBM organizations, including IBM Interactive, IBM Global Mobile Center of Competence and most recently the Apple+IBM Global Partnership. As an IBM Fellow, Blaine will continue to serve as CTO of the Apple+IBM Global Partnership, while also offering technical leadership and guidance to The Weather Company, an IBM Business, and IBM's Global Partnerships with Box and Twitter.

### **Stacy Joines – Performance Engineering**

IBM Watson

Stacy Joines is the Chief Technology Officer of Watson Client Implementations. In this position, Stacy builds on her contributions to the field of performance to deliver robust cognitive solutions. She has a long history of delivering and sustaining IBM's high-volume clients in the WebSphere Application Server and Smarter Commerce spaces. As an IBM Fellow, Stacy will apply the concepts of performance and end-user workload metrics to the era of cognitive computing.

### **Shankar Kalyana – Cloud Business Solutions**

IBM Global Business Services

Shankar Kalyana has worked for IBM in the US and India, helping clients across banking, government, automotive and other industries transform their organizations using cloud computing. Shankar Kalyana is currently serving as Vice President, Distinguished Engineer and Chief Technology Officer of IBM Cloud Business Solutions. Shankar's noteworthy technical accomplishments include launching the IBM Cloud Business Solutions technical and delivery model, and the launch of a cloud-based personalized learning solution that now delivers cognitive computing-generated education to students.

### **Adam Kocoloski – Cloud Data Services**

IBM Analytics

Adam Kocoloski joined IBM in 2014 through the acquisition of Cloudant, where he built a highly scalable database-as-a-service by extending Apache CouchDB. At IBM, Adam applied the lessons learned at Cloudant to form a Cloud Data Services group. His expertise and entrepreneurial spirit will be critical as IBM continues to innovate and serve clients as a cognitive solutions and cloud platform company.

### **William Kostenko – z Systems**

IBM Systems

William (Bill) Kostenko is the Chief Engineer for IBM z Systems hardware. Bill's innovation, leadership, and strategic vision were fundamental to the (5 GHz) z13 launch in 2015. His design also anticipated and

provided key technology to accelerate the delivery of IBM's POWER8 high-end and mid-range systems. Bill is a leading innovator of data center optimization, system energy efficiency, the transformation of Systems hardware, and the delivery of large hardware cost reductions.

### **Josyula Rao – Security and Analytics**

#### **IBM Research**

Josyula (JR) Rao is the Director of IBM Security Research. JR is widely known for his pioneering technical contributions to the development of empirical and analytical methods for security. This is best exemplified by an industry-wide vision that JR has created for applying big data security intelligence for protecting enterprise, mobile and cloud environments. These ideas were instrumental in IBM's acquisition of Q1 Labs as well as establishing and evolving IBM's Security Business Unit. As an IBM Fellow, JR will continue to define and develop new technologies that address emerging challenges in security and privacy.

### **Salim Roukos – Natural Language Processing**

#### **IBM Research**

Salim Roukos' work has significantly accelerated machine translation research and development over the past decade. The multilingual technologies developed by Salim have been key drivers for expanding IBM cognitive services and multilingual question-answering client engagements by making Watson systems understand non-English languages. As an IBM Fellow, Salim will lead the strategic research and development in multilingual natural language cognitive systems and services, expanding his influence to provide cognitive, integrated analytics and big data components that can reason over large, unstructured multilingual content and integrate with structured information for the finance, healthcare, government, and insurance industries.

### **Ajay Royyuru – Computation Biology and Genomics**

#### **IBM Research**

Ajay Royyuru leads Healthcare and Life Sciences Research at IBM and is an expert in computational biology and genomics. Ajay's latest work has been dedicated to human genetic research to help combat diseases. Using Watson for Genomics, Ajay built a system to translate genomic variations in cancer to treatment options. Today, leading medical institutions are using the technology as a research tool to inform deliberations on new patients. Ajay's early work on computer modeling 3D structures of protein sparked the birth of IBM Blue Gene. It was both the most powerful and efficient supercomputer of its time, and has gone on to advance other simulations in life sciences, for example exquisite biophysical simulations of human heart and neural tissue, and diverse disciplines of physics, chemistry, material science and other areas.

### **Malgorzata Steinder – Container Cloud Research**

IBM Research

Malgorzata (Gosia) Steinder's work is in the area of workload and resource management for hybrid cloud and data centers. Over the course of her career, Gosia has pioneered important concepts and technologies such as dynamic application clusters, workload-centric resource management, power-aware and license-aware workload placement, and container clouds. Her work has enabled IBM clients to greatly simplify the lifecycle management of their applications by removing the need for manual intervention in deploying, scaling and managing availability of applications.

### **Tanveer Syeda-Mahmood – Cognitive Computing and Medical Imaging**

IBM Research

Tanveer is currently the Chief Scientist leading the Medical Sieve Radiology Grand Challenge project, a global IBM Research project aiming to develop automated, cognitive radiology and cardiology technology to aid clinician decision-making. This flagship project has made tremendous scientific advancements to establish IBM as a thought leader in cognitive computing and medical imaging. Over the last 25 years, Dr. Syeda-Mahmood has made a broad and deep impact to the field of healthcare through her pioneering research in content-based image and video indexing that established a new field of multimodal clinical decision support in healthcare. As an IBM Fellow, Tanveer will continue to apply cognitive computing to healthcare informatics and strengthen medical imaging technology.

For more information on the 2016 IBM Fellows,

visit: [http://www.ibm.com/ibm/ideasfromibm/us/ibm\\_fellows/2016/](http://www.ibm.com/ibm/ideasfromibm/us/ibm_fellows/2016/)

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