

Time Slot	Track A: Dev	Track B: Data	Track C: IT Pro
	Bibb Graves 225	Bibb Graves 235	Bibb Graves 237/239
8:00 – 8:30	Check-in & Networking <i>Bibb Graves Main Lobby &amp; Atrium</i>		
8:30 – 10:30	<b>Opening Session:</b> <b>Welcome, Azure Sign-Up, Science Lab Participation, and Intro to Azure</b> <i>Bibb Graves 225</i>		
10:30 – 11:00	Morning Coffee Break <i>Bibb Graves Atrium</i>		
11:00 – 12:00	<b>Deploying and Monitoring Web Apps</b> Sven Aelterman		<b>Powering Azure from PowerShell</b> Robert Cain
12:00 – 1:00	Lunch <i>Bibb Graves Atrium</i>		
1:00 – 2:30	<b>Azure Mobile Apps with Cordova</b> Alex Chance	<b>Intro to Azure SQL Database</b> Sven Aelterman	<b>Implement and Manage Azure Virtual Networks</b> Dave Franklyn
2:30 – 3:00	Afternoon Snack & Drink Break <i>Bibb Graves Atrium</i>		
3:00 – 4:30	<b>Azure Service Fabric</b> Xiangdong Zhang	<b>Azure HDInsight</b> Dr. Ingyu Lee	<b>Deploy Custom Azure VMs</b> Dave Franklyn
4:30 – 5:00	Event Wrap-Up and Door Prizes		

### Program Supporters

Thanks to the following supporters of the Information Systems program for making this event free:



## Speakers

**Sven Aelterman** is the Director of IT for the Sorrell College of Business at Troy University and Cloud Software Architect for Sorrell Solutions, L.L.C., a wholly-owned subsidiary of the Troy University Foundation providing business services. Reach Sven on Twitter at @svenaelterman.

**Robert C. Cain** (<http://arcanecode.com>) is a Microsoft MVP, MCTS Certified in BI, and is the owner of Arcane Training and Consulting, LLC. He is also a course author for Pluralsight, teammate at Linchpin People, and co-author of 5 books. A popular speaker, Robert has presented at events such as the SQL PASS Summit, IT/Dev Connections, TechEd, CodeStock, and numerous SQL Saturdays. Robert has over 25 years' experience in the IT industry, working in a variety of fields including manufacturing, insurance, telecommunications and nuclear power.

**Alex Chance** is a Programmer Analyst for Coleman Worldwide Moving in Midland City, Alabama. He is currently focused on developing enterprise applications using the Microsoft technology stack. He received his Information Systems degree from Troy University in May of 2015.

**Dave Franklyn**, MCT, MCSE, Microsoft Certified IT Professional (MCITP), Microsoft Most Valuable Professional (MVP) Windows and Devices for IT, is a Senior Information Technology Trainer and Consultant for Dunn Training, Atlanta, GA, and the owner of DaveMCT, Inc. LLC. He is also an East USA Microsoft Regional Lead MCT. Dave has been a Microsoft MVP since 2011 and has been teaching at Auburn University since 1998. Working with computers since 1976, Dave started out in the mainframe world and moved early into the networking arena. Before joining Auburn University, Dave spent 22 years in the US Air Force as an electronic communications and computer systems specialist, retiring in 1998. Dave is president of the Montgomery Windows IT Professional Group.

**Ingyu Lee** is an instructor in the Sorrell College of Business at Troy University. He received his Ph.D. from the Department of Computer Science and Engineering at The Pennsylvania State University. He spends his time on teaching programming to Information System major students. His main interest is developing data mining and machine learning algorithms, and applying those algorithms to business applications.

**Xiangdong Zhang** is a senior software engineer at the SSI Group in Mobile AL. He is most focused on Web technology and Microsoft stack as his backend choice. He is excited about new technologies, particularly in the cloud frontier, for instance Microsoft Azure and any frontend development. More recently, he grew his interest by tinkering with Arduino, 3D printing, and exploring IoT.

## Session Descriptions

9:30 – 10:30 ..... [Intro to Azure](#) ..... [Bibb Graves 225](#)

The introduction to Azure session is designed to provide an overview of the services Azure offers, as well as provide updates to recent additions and changes to Azure. Regardless of your experience level with Azure, this session will form the foundation for the remaining sessions of the day.

In this intro session, you'll also be guided through activating an Azure trial subscription if you have not done so on site. Note that a credit card is required to complete signup.

11:00 – 12:00 ..... [DEV: Deploying and Monitoring Web Apps](#) ..... [Bibb Graves 225](#)

In this session, you will learn how to deploy an ASP.NET MVC application to the Azure Web App Platform-as-a-Service (PaaS) offering. After deploying the application, you will also learn how to monitor the application's health and performance using the tools available in Azure.

11:00 – 12:00 ..... [IT PRO: Powering Azure from PowerShell](#)..... [Bibb Graves 237/239](#)

In this session, you'll be introduced to the PowerShell cmdlets for managing your Azure infrastructure. You'll see how to manage your Azure storage, create virtual machines, and even work with SQL Azure. By the end of this session you'll understand how to use PowerShell to manage the most common Azure tasks.

## Session Descriptions (continued)

1:00 – 2:30 ..... DEV: Azure Mobile Apps with Cordova..... Bibb Graves 225

Apache Cordova is an open-source framework that allows development of cross-platform mobile apps using HTML5, CSS3, and JavaScript. Using Cordova, the app essentially runs as a Web application, where the Cordova framework provides the necessary controls and interfaces optimized for the operating system the app runs on. Visual Studio Tools for Apache Cordova make it easier to develop Cordova apps targeting Windows, iOS, and Android. Azure Mobile Apps are now part of the Azure App Service and provide powerful features to assist in developing cross-platform apps, including single sign-on, push notifications, offline syncing, Easy Tables and Easy APIs. This lab will show how to combine these tools to create cross-platform mobile apps that leverage the power of the Microsoft Azure cloud.

1:00 – 2:30 ..... DATA: Intro to Azure SQL Database ..... Bibb Graves 235

Deploying an application to the cloud requires some form of data storage. This session will provide an intro to Azure SQL Database, the Database-as-a-Service (DBaaS) offering in Microsoft Azure.

1:00 – 2:30 ..... IT PRO: Implement and Manage Azure Virtual Networks..... Bibb Graves 237/239

You have two large office buildings in different regions – an HQ and a main branch office. In order to serve these locations rapidly, you plan to have separate Azure virtual networks in the two regions that match the office locations. You must design the subnets for these networks, create the new virtual networks, configure connectivity between the two virtual networks, and then validate the connectivity.

3:00 – 4:30 ..... DEV: Azure Service Fabric..... Bibb Graves 225

We will explore the offer Microsoft provided to realize microservice architecture, Azure Service Fabric, by starting with why the industry is talking about it, what it is and what the pros and cons are. Then we will dive directly into Azure Service Fabric to show three different programming modes it provides with "live coding" in Visual Studio as much as possible.

3:00 – 4:30 ..... DATA: Azure HDInsight..... Bibb Graves 235

In this talk, we will explore how to use the Hadoop big data technology in Microsoft Azure HDInsight. We will build solutions that clean and reshape data for analysis using Hive, Pig, and Sqoop on Hadoop in HDInsight. To follow the hands-on labs, the audience is expected to have an Azure account to build an HDInsight cluster on Azure, installed the Microsoft Azure Storage Explorer on client, and SSH client software to access the HDInsight clusters.

3:00 – 4:30 ..... IT PRO: Deploy Azure Custom VMs..... Bibb Graves 237/239

As part of the planning for Microsoft Azure, you have been asked to determine the virtual machines that will be needed to run two intranet web applications, together with their sizes and locations. One application is a simple expense-reporting application and runs on Windows and IIS and uses SQL server to store data. The other application is a pool car booking application and runs on Linux and Apache and uses MySQL to store data. You will then deploy and configure Windows and Linux VMs.