

Past December courses.

Date (sorted)	Title/Fees	Description
<p>17th Dec (PM) – 2.00 to 5.30pm</p> <p>18th Dec (Full Day) – 9.30 to 5.00pm</p> <p>@SIS SR2.4</p>	<p>Big Data Analytics with kdb+</p> <p>Fees: \$21.40</p>	<p>For: Students interested in big data and using the kdb+ technology for ultra-high-speed processing of real-time, streaming and historical data.</p> <p>Prerequisites:</p> <ul style="list-style-type: none"> - Keen interest in big data - Prior academic or professional experience with any programming language, i.e. Java, R, Python, Matlab - Students must attend the introductory session on 17 Dec to take part in the hands-on workshop on 18 Dec <p>Min class size: 15 (the class will run only with min size) Max class size: 30</p> <p>Instructor: Warren Yong & Eamonn McKernan</p> <p>About Kx: Kx is a global technology provider with 20 years of experience working with some of the world’s largest finance, technology, retail, pharma, manufacturing and energy institutions. Kx technology, incorporating the kdb+ time-series database, is a leader in high-performance, in-memory computing, streaming analytics and flexibility for high-volume, data-intensive analytics and applications across multiple industries.</p> <p>Syllabus Details: Join us for 1.5 days of exciting sessions on the power Kx technology, interesting real-life use cases and a hands-on coding workshop.</p> <p>The first session will entail explaining how Kx supports streaming analytics on extremely large datasets that would simply swamp traditional technologies. This talk is a perfect opportunity to learn about the power and scalability of Kx and how it can be applied to real-life business problems across a range of industries from Finance to retail and the evolving challenges of IoT and everywhere connected.</p> <p>The follow-up full day workshop will help students gain insight into the world’s fastest time-series database, kdb+ and the many features of its q programming language. This hands-on session explains how kdb+ can address today’s data challenges. The program highlights the advantages of using q to analyse massive data sets and obtain real insights.</p> <p>At the end of both days, students will receive a complementary Kx certification stipulating his/her completion of the introductory kdb+ Level 1 course including kdb+ concepts, programming and data mining techniques. Given our diversified client pool across institutions such as NASA, Red Bull Racing and closer to home, SGX, GIC and Standard Chartered, we encourage students to include this</p>

		<p>on their resumes for increased visibility during job searches as well as knowledge of the Kx technology which is highly relevant in the industry today!</p> <p>In terms of transferable skills, students should be able to grasp through the workshop:</p> <ol style="list-style-type: none"> 1. How information is captured and stored 2. How to query this information 3. What are the best techniques to mine this data 4. What are the best tools to visualise this data set 5. Architecture design
<p>3 Jan 1400 - 1700</p> <p>@TBC</p> <p>Cancelled [Not enough participants]</p>	<p>Dynamic Programming</p> <p>Fees: \$10.70</p>	<p>For:</p> <ol style="list-style-type: none"> 1. Students who have strong interests in algorithms 2. Prepare students for the course IS448 Introduction to Artificial Intelligence. <p>Prerequisites: IS103 Computational Thinking</p> <p>Min class size: 5 (the class will run only if the min size is met) Max class size: 40</p> <p>Instructor: DAI Bing Tian</p> <p>Syllabus Details:</p> <ul style="list-style-type: none"> - Recursion and Iteration - Dynamic programming
<p>3 & 4 Jan 2019 [2 full days]</p> <p>@TBC</p> <p>Cancelled [Not enough participants]</p>	<p>Understanding Blockchain</p> <p>Fees: \$21.40</p>	<p>For: Students interested in blockchain technology.</p> <p>Prerequisites: Nil</p> <p>Min class size: 15 (the class will run only with min size) Max class size: 40</p> <p>Instructor: Trainer from NEM</p> <p>Syllabus Details: Blockchain 101 & NEM 101</p> <p><u>Blockchain 101 (1 day)</u> In this module, you will learn about what is Blockchain and its characteristics. It will bring you down the history of the emergence of Blockchain technology, what triggered it and how it caught the attention of the world. You will be exploring the important mechanisms of the Blockchain and how it can change the world around you. Most important of all, what role you can play. Key topics include:</p> <ul style="list-style-type: none"> - The Technology behind Blockchain - Features of Blockchain - History of Blockchain - Features of Blockchain <p><u>NEM 101 (1 day)</u></p>

		<p>In this module, NEM will be introduced to you. Its history, its architectural design, its consensus protocol, its Smart Assets and their features. Comparison of NEM with other Blockchains and the advantages using NEM Blockchain will also be discussed. You will find everything you need to know before you take the leap of faith.</p> <ul style="list-style-type: none"> - History of NEM - NEM architecture - Advantages of using NEM - NEM Assets - Harvesting - Consensus protocol - Comparison
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Past Summer Courses

Date (sorted)	Title/Fees	Description
<p>13 - 17 Aug 0930 - 1230 @TBC</p> <p>Closed</p>	<p>Web Data Extraction and Regression Analysis</p> <p>Fees: \$21.40</p>	<p>For: SMU undergraduates, postgraduates, and staff who are interested in collection and analysis of Web data.</p> <p>Prerequisites: Knowledge of Java programming.</p> <p>Min class size: 15 (the class will run only with min size) Max class size: 30</p> <p>Instructor: Preferred.AI (http://preferred.ai)</p> <p>Syllabus Details: The Web is an enormous repository of data. Frequently, in our work or study, we need to access some information from the Web for projects, market research, hypothesis testing, application development, etc. In this course, we cover the fundamentals of how data on the Web are represented, how we can construct programs that systematically extract data from specific Web sources and organize them into a structured form, and how to conduct regression analysis for basic prediction tasks. This is a hands-on course. Attendees are expected to attend all five days, and to complete a small group project by the end of the course.</p> <ol style="list-style-type: none"> 1. Representations of Web data and focused crawling 2. Data extraction workshop 3. Regression analysis 4. Data analysis workshop 5. Project presentations and evaluation
<p>20 Jun 1000 - 1700 @SIS SRB1-1</p> <p>Registration closed</p>	<p>Blockchain and Smart Contracts</p> <p>Fees: \$10.70</p>	<p>For: Students who wants to learn how to create and program blockchains and Smart Contracts.</p> <p>Prerequisites: Basic programming experience, Javascript is best. Must bring a PC for lab section.</p> <p>Min class size: 5 (the class will run only with min size) Max class size: 45</p>

		<p>Instructor: Paul GRIFFIN</p> <p>Syllabus Details: Blockchain and Smart Contracts are at the heart of new disruptions to finance and other industries with crypto-currencies such as BitCoin and distributed ledgers being used by many start-ups. This class provides the background and how to start programming these important technologies. There will be 2 sessions of 3 hours each with a mix of theory and hands-on work. By the end of the sessions participants will be able to install a blockchain, mine blocks and write, deploy and execute Smart Contracts. We will be using Ethereum as the blockchain and Smart Contract engine and program in Solidity. A knowledge of programming is assumed but only up to understanding scripts (ideally Javascript).</p>
<p>13-14 Aug 0930 - 1630 @TBC</p> <p>Registration closed</p>	<p>Jumpstart to iOS Programming</p> <p>Fees: \$21.40</p>	<p>For: Students interested in to build iOS application</p> <p>Prerequisites: - You need a Mac to participate - Generally proficient in Java programming, as Swift has very similar syntax</p> <p>Min class size: 15 (the class will run only with min size) Max class size: 30</p> <p>Instructor: ONG Hong Seng</p> <p>Syllabus: The key idea of the course is to give a jumpstart for student who are interested to build iOS apps</p> <ol style="list-style-type: none"> 1. Getting started 2. Deploying app to simulator and device(s) 3. Coding in Swift 4. Building a simple app 5. Knowing how to progress with given iBooks

Past courses

<p>2-3 May 0900 - 1700 @SR2.4</p> <p>Registration closed</p>	<p>Web Application Development with ReactJS Workshop</p> <p>Fees: \$21.40</p>	<p>For: Students who wants to pursue a career as an Application Developer.</p> <p>Pre-requisites: Comfortable writing JavaScript, HTML and CSS. Familiar with the complimentary tool chain: (eg IDE, text editor, command line)</p> <p>Note: If you do not meet the pre-requisites, please do not register. There will be no refund for registrants who register but do not meet the pre-requisites.</p> <p>Min class size: 10 (the class will run only with min size)</p>
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		<p>Max class size: 30</p> <p>Invited Instructor (from Credit Suisse): Paul Ng, full-stack developer at Credit Suisse and SIS alumna</p> <p>Syllabus: During this workshop, you will learn to build a web application. In the workshop we will attempt to simulate real software development with continuous integration (using Circle CI) and automatic testings (using Jest).</p>
<p>7-8 May 1200 - 1800 @SR3.3</p> <p>Registration closed</p>	<p>Jumpstart to Android Programming</p> <p>Fees: \$21.40</p>	<p>For: Students interested to do some android apps either for Project Experience or for own use</p> <p>Prerequisites: Basic Programming</p> <p>Min class size: 12 (the class will run only with min size) Max class size: 45</p> <p>Student Instructor: WU Jianhua</p> <p>Syllabus: Want to learn how to create Android app? Ever heard of firebase by Google?</p> <p>Firebase provides features such as Database, Storage, and Analytics of your Apps. Those features enable you to build better apps. In this enrichment, it gives you a jump-start to android development. In which you will learn how to create an app and integrate it with firebase and utilize its features.</p> <p>And here are some of the other features of the app:</p> <ul style="list-style-type: none"> - Logging in using Google Account - Utilizing Camera to captured image or as QR Scanner - Utilizing GPS to get current location - Uploading data to firebase database or storage <p>At the end of the 2nd day, there will be a demonstration of uploading apps to Google PlayStore and sharing personal tips and experience on what to look out for when uploading the app to Google PlayStore!</p> <p>We will be using Android Studio as the IDE to create an android application. Don't worry if you are using Mac, as Android Studio supports both Windows and Mac Laptop</p>
<p>9 May 0930 - 1700</p> <p>10 May 0930 - 1200 @TBC 2 days course</p>	<p>SalesCloud</p> <p>Fees: \$42.80</p>	<p>ONLY for matriculated students</p> <p>For: Students who are interested in learning more about salesforce functionalities that allows them to quickly get up to speed on the Salesforce Sales Cloud and its productivity tools.</p>

<p>Registration closed</p>		<p>Prerequisites: Basic operation of an application through web browser</p> <p>Min class size: 12 (the class will run only if min size) Max class size: 25</p> <p>Instructor: LEE Kok Khing</p> <p>Syllabus: Students will learn how a Sales Representative will use the Sales Cloud to prospect for clients, manage accounts and opportunities, manage workflow, communicate with clients, and run reports. Students will also learn how a Sales Manager analyzes and improves sales processes from lead assignment to deal closure using Salesforce Sales Cloud.</p> <p>Notes:</p> <ul style="list-style-type: none"> · SMU is conducting this course under the Salesforce Academic Alliance.
<p>16 May 1000 - 1300 @TBC</p> <p>Registration closed</p>	<p>Quantum Computing Primer</p> <p>Fees: \$10.70</p>	<p>For: Students who wants to learn about how Quantum Computers differ from current computers, their potential applications and current challenges and issues.</p> <p>Prerequisites: Basic understanding of current computer technology e.g. bits and logic gates.</p> <p>Instructor: Paul GRIFFIN</p> <p>Syllabus Details: The underlying principles and applications of quantum computing will be discussed and demonstrated. Real life examples will be given with explanations on how quantum computers can help solve some problems more efficiently. Current theoretical and technical issues will also be discussed. There will be 2 sessions of 1.5 hours each with a mixture of theory and demonstrations to help understand the different way quantum computers work. There will be a prize for any student that generates a new idea for the application of quantum computers or a potential solution to a current issue.</p>
<p>17 May 1030 - 1530 @TBC</p> <p>Registration closed</p>	<p>Be a Pro Mac User!</p> <p>Fees: \$10.70</p>	<p>For: Students interested in to maximise their use of their Mac</p> <p>Prerequisites:</p> <ul style="list-style-type: none"> - You need a Mac to participate - Bring your charger / adapter <p>Min class size: 15 (the class will run only with min size)</p>

		<p>Max class size: 30</p> <p>Student Instructors: Gabriel Chuan, Andrew Tay</p> <p>Syllabus: The key idea of the course is to help students maximise their use of their Mac. Learn tricks to get better at using your mac. Save time on multiple tasks with these tricks!</p> <p>Using Preview.app Copying from Powerpoint/Preview quickly Mac Snipping Tool Using QuickTime Display iPhone Screen on Mac Record Screens Using AirDrop Using Spectacle.app For Resizing Accessibility Tips - Invert Colors, ctrl+zoom and gestures Hot Corners - quick logout, etc (Bonus) Setup homebrew, iTerm and zsh iCalendar.app - Shared Calendar + Delegates Virtualization / Bootcamp</p>
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<p>21 -22 May 0900 - 1700 @TBC</p> <p>Registration closed</p>	<p>Introduction to Node.js & NoSQL Databases w/ MongoDB</p> <p>Fees: \$21.40</p>	<p>For: Students who wish to learn more about server-side Javascript web application development with Node.js and go beyond traditional relational database systems, exploring concepts around document-oriented NoSQL databases</p> <p>Pre-requisites: Basic javascript programming and database concepts</p> <p>Note: If you do not meet the pre-requisites, please do not register. There will be no refund for registrants who register but do not meet the pre-requisites.</p> <p>Min class size: 10 (the class will run only with min size) Max class size: 40</p> <p>Student Instructors: Prakoso Budi SANTOSO, Bertran Queck Kiian Leong</p> <p>Syllabus: <u>NoSQL</u></p> <ul style="list-style-type: none"> - Basic concepts of NoSQL databases - Horizontal scalability & distributed processing: tables distributed in different location yet acts as one during processing; useful in today's context where performance of data retrieval and storage is a concern with the proliferation of Big Data and IoT technologies. - Flexible data models: key/value pair style
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		<p><u>Node.js</u></p> <p>You will learn about a server-side language that is built on Javascript, utilizing a non-blocking I/O model to handle request-response cycles built on top of a web application server framework, Express. We will be exploring basic concepts around Node such as syntax, control and looping structures, inheritance, callbacks, dependency management, etc,</p> <p>Node.js & NoSQL are useful skills for developer roles in the current market.</p>
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January 2018 Courses

Date (sorted)	Title/Fees	Description
<p>2 Jan 2018 0900 - 1700 @SIS SR2.4</p>	<p>Front-End Development with ReactJS Workshop</p> <p>Fees: \$12.84</p>	<p>For: Students who aspire to be a full-stack developer or have interest in frontend development</p> <p>Pre-requisites: Have a good understanding of JavaScript, HTML and CSS</p> <p>Note: If you do not meet the pre-requisites, please do not register. There will be no refund for registrants who register but do not meet the pre-requisites.</p> <p>Min class size: 10 (the class will run only with min size) Max class size: 30</p> <p>Invited Instructor (from Credit Suisse): Paul Ng, full-stack developer at Credit Suisse and SIS alumna</p> <p>Syllabus: During this workshop, you will learn to build production-quality frontend codes which are test-friendly and maintainable. The workshop will use some ES6 features such as arrow functions and ES6 classes.</p>
<p>3-5 Jan 2018 0900 - 1700 @SIS SR2.4</p>	<p>Natural Language Processing by Taiger Academy</p> <p>Fees: \$34.24</p>	<p>For: Students interested in learning Artificial Intelligence and practical applications</p> <p>Pre-requisites: Introduction to Programming/IS Software Foundation & Data Management</p> <p>Note: If you do not meet the pre-requisites, please do not register. There will be no refund for registrants who register but do not meet the pre-requisites.</p> <p>Min class size: 20 (the class will run only with min size) Max class size: 30</p> <p>Invited Instructors (from Taiger Academy): Professors and TAIGER'S own engineers</p> <p>Syllabus:</p>

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| | | <ul style="list-style-type: none">- 3 day in-depth course on Natural Language Processing, with live examples featuring some of TAIGER'S technology.- This 3-day course will be conducted by professors and TAIGER'S own engineers with a mix of AI theory and hands on with practical AI tools.- Students will not need to have attended the previous Foundations in AI course to gain maximum benefit from this upcoming course. |
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