Program Activity Update

Thailand

Suthinee Leelahemaratana
Program Manager, Social Innovation Group

Agenda

1. Student Competition
2. IoT Workshop, CCNA Cyber Ops Training
3. CCNA Certificate Reimbursement for Student

$300,000 in Prizes • Calling Students and Recent Grads

Cisco Global Problem Solvers Challenge

Submission Deadline: January 12, 2018

How can your innovative technology solution solve the world's most pressing social and environmental problems?

Grand Prize
The Grand Prize winner will receive $100,000 USD.

First Runner Up
The First Runner Up will receive $75,000 USD.

Second Runners Up
Three teams will be designated the Second Runners Up and will receive $25,000 USD each.

Third Runners Up
Four teams will be designated the Third Runners Up and will receive $10,000 USD each.

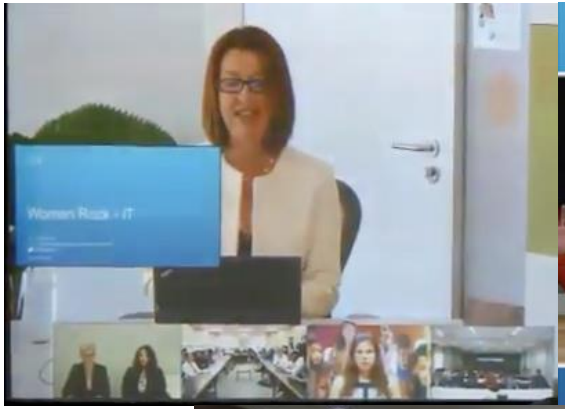
People's Choice
The People's Choice winner will receive $10,000 USD.

Why should you participate?

- Significant cash infusion to help develop your company/solution
- Global recognition and publicity for your company/solution
- Looks great on a resume or in a prospectus to potential funders
- Review by Cisco technology experts and high profile judges
- Peer and industry validation for your solution

cisco.**innovationchallenge**.com

Women Rock-IT



Overview

The program's goal is to inspire more young women to study tech to ensure they are prepared for **tomorrows best job** opportunities.

Participant Offers

- Self-enroll course access:
  - Introduction to the Internet Of Things
  - Introduction to Cyber Security
  - Entrepreneurship
  - Linux Essentials
- Certificate of Participation

After attending:

98% think tech skills are important to their career.

76% will enroll in a tech course in the next 6 months.

#womenrockit

Women Rock-IT

AGENDA 2018

DATE	TOPIC	SPEAKER
8 March 2018	Women in Cybersecurity @ Cisco Live, Melbourne	**Cisco** Women in Cybersecurity
Thursday, 15 March 2018	Girls Are Tech Superhero's	**Dr. Jenine Beekhuyzen** Tech Girls Movement
Thursday, 7 June 2018 12 pm SGT / 3pm AEDT / 9am IST	How Online Gamers Are Solving Some of the Worlds Biggest Problems. From Garden Farms to Large Scale Farms, Optimization of water usage in growing plants using IoT Technology.	**Jude Ower MBE** Founder and CEO Playmob **Lisa Kikuchi** CEO SenSprout

The Networking Academy Learning Portfolio

Current & Planned

Aligns to Certification
Instructor Training required
Self-paced

* Available within 12 months

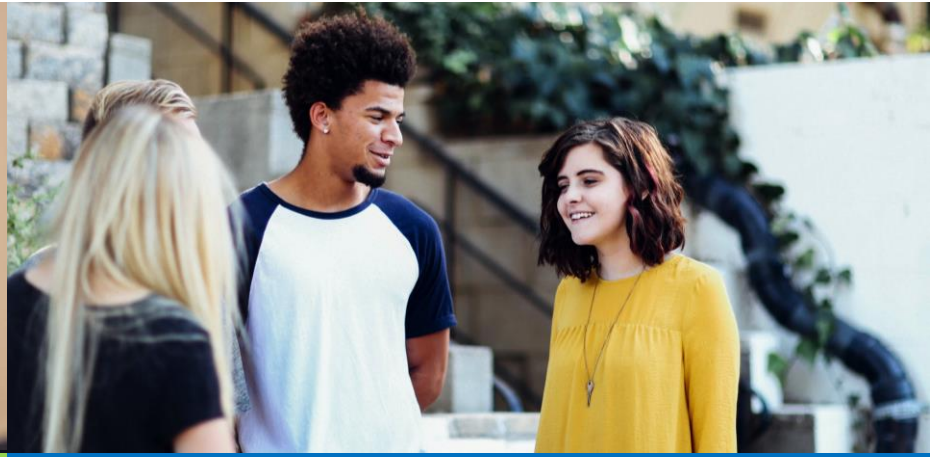
Collaborate for Impact

Introduction to Packet Tracer | **Packet Tracer** | **Hackathons** | **Prototyping Lab** | **Internships**

	Exploratory	Foundational	Career-Ready
Networking		**Networking Essentials** **Mobility Fundamentals** **Emerging Tech Workshop:** Network Programmability Using Cisco APIC-EM*	**CCNA R&S:** Introduction to Networks, R&S Essentials, Scaling Networks, Connecting Networks **CCNP R&S:** Switch, Route, TShoot
Security	**Introduction to Cybersecurity**	**Cybersecurity Essentials**	**CCNA Security** **CCNA Cyber Ops**
IoT & Analytics	**Introduction to IoT**	**IoT Fundamentals:** Connecting Things, Big Data & Analytics, IoT Security* Hackathon Playbook	
OS & IT	**NDG Linux Unhatched**	**NDG Linux Essentials** **IT Essentials**	**NDG Linux I** **NDG Linux II**
Programming		**CLA: Programming Essentials in C** **CPA: Programming Essentials in C++** **PCAP: Programming Essentials in Python** **Emerging Tech Workshop:** Experimenting with REST APIs using Cisco Spark*	**CLP: Advanced Programming in C*** **CPP: Advanced Programming in C++**
Business	**Be Your Own Boss**	**Entrepreneurship**	
Digital Literacy	**Get Connected**		

January 2018

Course Delivery Options



Instructor-Led

Courses that are opened and taught by an instructor in a face-to-face classroom, or in a blended classroom and distance-learning environment, or remotely

Self-Paced

Online, self-enroll courses that students complete at their own pace, sometimes within a set time frame. Self-paced offerings include podcasts.

IoT Workshop

Connecting Things
Big Data & Analytics

1. Workshop at KMITL
2. Pending date is 9-13 July 2018
3. 20 Instructors
4. Teach 20 students within 6 months
5. No training fee required

IoT Fundamentals: Connecting Things

Course Overview

In Connecting Things, students learn how to securely interconnect sensors, actuators, microcontrollers, single-board computers, and cloud services over IP networks to create an end-to-end IoT system.

Benefits

Students will develop the interdisciplinary skillsets required to prototype an IoT solution for a specific business case with a strong focus on the security considerations for emerging technologies.

Learning Components

- Understand and explain the concepts, opportunities and challenges of digital transformation using IoT.
- Interconnect sensors/actuators, microcontrollers (Arduino), Single Board Computers (Raspberry Pi) and cloud services (Cisco Spark restful API) to create an end-to-end IoT system.
- Understand the relevant aspects of cybersecurity and privacy for an IoT solution.
- Understand how digitalization is changing vertical markets such as manufacturing, energy, and smart cars.
- Use simulation tools (Packet Tracer) to create end-to-end IoT system.

Features

Target Audience: Secondary, Vocational, 2-year and 4-year College, 4-Year University students

Prerequisites: Basic programming, networking and electronics

Instructor Training Requirement: Yes

Languages: English

Course Delivery: Instructor-led

Estimated Time to Complete: 40-50 hours

Recommended Next Course: IoT Fundamentals: Big Data & Analytics or Hackathon Playbook

Connecting Things Course Outline

Chapter	Chapter Titles	Summary Description
1	Things and Connections	Understand the building blocks, the interconnections and the information flow of an IoT System.
2	Sensors, Actuators and microcontrollers	Use sensors and an Arduino microcontroller to read data from physical world and control actuators.
3	Software is Everywhere	Use Python to program a Single Board Computer (Raspberry Pi) to perform more complex embedded program.
4	Fog Networks and Cloud Computing	Learn the principal IoT Networking Protocols. Learn how an IoT system distributes computing between Fog and Cloud networks. Learn how to interconnect systems using RESTful APIs.
5	IoT Applications in Business	Learn how IoT technologies are applied in diverse vertical markets: Healthcare, Smart Cities, Smart Grid, Manufacturing.
6	Create an IoT Solution	End-to-End case study on how to create an IoT Prototype.

IoT Fundamentals: Big Data & Analytics

Course Overview

Students will learn how to use Python data libraries to create a pipeline to acquire, transform and visualize data collected from IoT sensors and machines.

Benefits

The transformative element of any IoT system is the data that can be collected from it. Thus the ability to extract data and using data analytics techniques to gain insights increases employability.

Learning Components

- Use Python to read data from sensors and store data in a SQL data base.
- Use Python Data Analysis library to clean, manipulate, integrate data sets.
- Use Python Visualization Libraries to visualize real-time data end explore acquired data sets.
- Explain the fundamental principles of a modern scalable Big Data platforms like Hadoop.
- Use storytelling to present the insights gained from extracted data.

Features

Target Audience: 2-year and 4-year College, 4-Year University students

Prerequisites: IoT Fundamentals: Connecting Things

Instructor Training Requirement: Yes

Languages: English

Course Delivery: Instructor-led

Estimated Time to Complete: 40-50 hours

Recommended Next Course: IoT Fundamentals: Hackathon Playbook

Big Data & Analytics Course Outline

Chapter	Big Data & Analytics	Summary Description
1	Data and the Internet of Things	Understand the concepts of Big Data & Analytics, and the role of Big Data in IoT systems.
2	Fundamentals of Data Analysis	Learn the basics of descriptive statistics, the practical aspects in acquiring data from a sensor and how to create visual representations of the data.
3	Data Analysis	Explore data using statistics and visualization to extract information and create hypotheses.
4	Advanced Data Analytics and Machine Learning	Learn about predictive analytics, the supervised and unsupervised approaches to machine learning and how to apply models to make predictions from the data.
5	Storytelling with Data	Learn how to transform analytics results into a clear and convincing narrative and visual communication.
6	Architecture for Big Data and Data Engineering	Learn the basic principles behind the most important scalable solutions for Big Data such as Apache Hadoop and the related ecosystem of technologies.

CCNA Certificate Reimbursement for Students

- Partnership with Digital Economy Promotion Agency (DEPA)
  - CCNA 150 students
  - CCNA Security 15 students
- Timeline June-November 2018
- Instruction will update in Instructor Facebook group


Q&A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