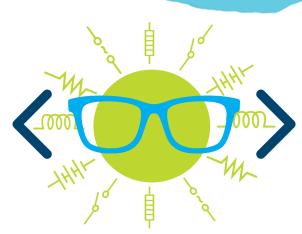
www.IntellectualPoint.com/stemworkshop





CYBERWARRIORS

Coding & Automation Experts STEM Workshop



Hands-on Raspberry Pi projects, Linux lessons, Robotic Process Automation (RPA), 7-Segment LED, Mine-craft and so much more.





WEEK 1

Linux 101 & Robotic Process Automation (RPA)





Agenda:

Day 1 Linux 101

- Passive Information Gathering
- Active Information Gathering
- Vulnerability
 Scanning
- Working with Exploits
- File Transfers
- Privilege Escalation

Day 2: Linux 101

- Client Side Attacks
- Web Application Attacks
- Password Attacks
- The Metasploit Framework
- Bypassing Antivirus Software
- Assembling the Pieces: Penetration Test Breakdown

Day 3: Linux 101 -The Hackathon

Day 4:

- Introduction
- Recording
- Advanced UI Interaction
- Selectors
- Image & Text Automation
- Excel & Data Tables
- Email Automation

Day 5:

- Debugging & Exception Handling
- Project Organization
- The Big RPA
 Showdown with
 Voice Assistant

Linux powers 94% of the world's super computers, most of the servers powering the Internet, the majority of financial trades worldwide and a billion Android devices. In short, Linux is everywhere. It appears in many different architectures, from mainframes to server to desktop to mobile and on a staggeringly wide variety of hardware.

Robotic process automation (RPA) is the use of software with artificial intelligence (AI) and machine learning capabilities to handle high-volume, repeatable tasks that previously required humans to perform. These tasks can include queries, calculations and maintenance of records and transactions.

Linux & RPA Course Overview

- 1. Introduction to Linux
- 2. Getting Started
- 3. Work Effectively on the Unix Command Line
- 4. Perform Basic File Management
- Search Text Files Using Regular Expressions
- 6. Create, Monitor, and Kill Processes
- 7. Modify Process Execution Priorities
- 8. Advanced Shell Usage
- 9. File-system Concepts
- Create and Change Hard and Symbolic Links
- 11. Manage File Ownership

- 12. Use File Permissions to Control Access to Files
- Create Partitions and Filesystems
- 14. Control File-system Mounting and Unmounting
- 15. Introduction to RPA
- 16. Recording
- 17. Advanced UI Interaction
- 18. Selectors
- 19. Image & Text Automation
- 20. Excel & Data Tables
- 21. Email Automation
- 22. Debugging & Exception Handling
- 23. Project Organization











The Raspberry Pi is a wonderful little computer that fits in the palm of your hand, yet packs enough power to run your home media center, a VPN, and a lot more.

Raspberry Pi Course Overview

- **1. Basic Commands** Students create, delete, and move files via command line
- **2. Camera** Students learn to operate the Raspberry Pi camera
- **3.** Audio Students learn to configure the Raspberry Pi to play sounds
- **4. Circuits** Students learn electrical theory, including concepts with resistor and LED circuits
- **5. Python** Students learn coding structures and styles of Python

Agenda:

Day 1

Introduction and Install Raspberry Pi and NOOBS

- Students introduce themselves to their peers and instructor(s) and share their previous knowledge of programming and electronics
- Students set up the operating system on their Raspberry Pi's with Raspberry Pi's New Out Of Box Software (NOOBS)
- Students take additional steps to prepare the SD card
- Students make small changes for optimal use
- Students learn to navigate through directories and add, move, and delete files

Day 2

Security Camera

- Students learn to use the Raspberry Pi camera
- Students learn to use the Face Detection and Photobooth
- Students create code that can recognize facial features and create virtual props



Day 3

7-Segment LED

- Students work with and illuminate a 7-segment LED
- Students enter a line
 of text, and the seven
 segment display will show
 each of the letters

Day 4

Pie Mai

Students create a game based off of the classic game Pac-Man

Day 5

Minecraft Maze Maker

 Students generate and explore a maze in Minecraft using Python









About Intellectual Point

Intellectual Point is a leading IT training, consulting and workforce development company. Our courses are designed with an emphasis on learning-by-doing to prepare busy professionals with the skills and certifications needed to be successful in the IT industry.

Our areas of expertise include: Cyber Security & Cloud Computing; Networking, Wireless and Data Center; Big Data; IoT & Data Science; Project Management; Agile; DevOps & ITSM; Artificial Intelligence & Machine Learning; Deep Learning & Cognitive Computing.

We take pride in helping future professional get started and learn the basics. We provide free Digital Natives Meetups to help the community learn. We also help at other community events.

Camp Information

Location: Intellectual Point

46175 Westlake Dr. # 240 Sterling,

VA 20165

Hours: 9 am - 3:30 pm

(Pick-up is no later than 4:00 pm. After 4:00

pm will be \$100 per hour.)

Lunch: Each camper needs to bring a

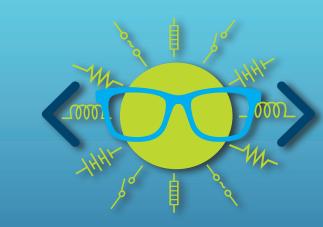
lunch. (Intellectual Point will provide

water and snacks)

Free: Each Camper will get a camp

t-shirt and the use of a computer

during camp.



Join us for hands-on fun that will keep your kids learning!

Sibling 5% Discount! Use Promo Code: Sibling5

www.intellectualpoint.com/stemworkshop







REGISTRATION

Camper # 1 Name:
School Grade:
Date of Birth:
Shirt Size (Y XS- Adult L)
*Each camper receives one t-shirt with camp registration. Additional shirts are available for \$15 each.

Camper # 2 Name:
School Grade:
Date of Birth:
Shirt Size (Y XS- Adult L)
*Each camper receives one t-shirt with camp registration. Additional shirts are available for \$15 each.

Camp Week
Week 1 • LINUX 101 & ROBOTIC PROCESS AUTOMATION (RPA) • \$479 Intellectual Point, 46175 Westlake Dr. #240 Sterling, VA 20165 • 9:00 am- 3:30 pm
Week 2 • RASPBERRY PI • \$479 Intellectual Point, 46175 Westlake Dr. #240 Sterling, VA 20165 • 9:00 am- 3:30 pm

Total Cost

Camp Tuition: \$479 per week Extra Shirt: \$15

Payments can be made at www.intellectualpoint.com or call our Office at 703-554-3827

*Payment Policy. One week's tuition is due at time of enrollment. We will charge a \$25 late fee if payment is not received by 12pm Tuesday.





Camp Registration Form

Camper Information					
Camper's Name				O Male	O Female
Address		City	/	_ State	Zip
Camper's Birth Date			Grade in	the Fall	
Parent/Guardian 1	O Male O Fe	male Cell #			
Email Address	Employe	er			
Parent/Guardian 1	O Male O Fe	male Cell #			
Email Address	Employe	er			
Child in custody of (Please check one) O Both Pa	arents O Mother	O Father	Other		
Child lives with (Please check one) O Both Pa	arents O Mother	O Father	O Other		
Medical Information					
Family Physician					
Address		City	/	State	Zip
Medical/Hospital Insurance Carrier					
Health/behavioral conditions or problems we need	d to be aware of				
Child Release Authorization					
In addition to Parent/Guardian names listed above child will not be allowed to leave with any person valued to show identification.				•	
Name		Relationship)		
Address			Phone #		
Name		Relationship)		
Address	Phone #				
Parent Authorization/Medical Release: The information proving all prescribed camp activities, except if noted by me. In the camp representative to order x-rays, routine tests, treatmen cannot be reached in an emergency, I hereby give permission hospitalization, for my child as named above. This form may be used for promotional purposes.	ne case of sickness or ac nt, dental work, and nec on to the physician sele	cident, I hereby give essary transportatio cted by the camp rep	permission to t n for the recipion resentative to s	he medical perso ent at my expense ecure and admin	nnel selected by the . In the event that I ster treatment, includin

Parent/Guardian Signature: