Nairuby

In Collaboration with BantaMik & iHub
Brings you
RUBY CONFERENCE KENYA 2019

PROGRAMME

@nairubyke
/nairubyke
Nairuby
Table of Contents

1. Introduction
2. Objectives
3. Outputs
4. Target Audience
5. Schedule
Introduction

Ruby Conference brings entrepreneurs, developers, open source contributors, and conference speakers from all around the world for a 3-day conference. Why? We believe in a holistic approach we would solve so many problems through entrepreneurship approach “Solution approach” and open source approach. This in return empowers everyone who attends with technology “tool” and entrepreneurship “Methodology” to reach their fullest potential and inspire the rest of the world and their communities.

Finding the complete solution for Africa will involve many different parties and many different techniques. Open source culture must be included in that toolkit to spur growth, innovation, and upliftment. By investigating their respective indicators in socio-economics, ICT penetration, and business environments, countries can determine which open source approach and practices suits them the best. Not every country will pursue the same open source and tool path, however, finding that best fit for each country’s need should be a critical area of focus for open source experts in the years to come.

Nairuby is a community organization made of developers, entrepreneurs and freelancers. In terms of development the community focuses on ruby technologies and frameworks, which are all open source and widely used by startups to prototype and carry out proof of concept with a go to market strategy. The community brings you Ruby conference every year with different themes to help spur innovation and growth in contribution to global economy.
Objectives

1. To champion open source

2. To equip entrepreneurs with relevant skills and experience

3. To provide a collaborating and networking platform for developers, entrepreneurs, academia and

4. To increase contribution and participation of African developers in the world open source contribution
The following are expected outputs from the Ruby Conference Kenya

1. **Engage developers and entrepreneurs in use and contribution of Ruby, Open source and other tools to solve problems**

2. **Create linkages between the diversity of stakeholders in the industry**

3. **Discuss how Academic and industry can grow and improve the adoption and support of open source.**

4. **Showcase and feature various startups and successes of open source and Nairuby community.**

5. **B2B and B2C networking**
Target Audience

- Academia
- Developers
- Entrepreneurs
- Private sector
- Innovators
- Investors
- Media
- Hackers
**Schedule**

Thursday 25th July, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM-8:30 AM</td>
<td>Registration and Networking</td>
</tr>
<tr>
<td>8:30 AM-9:30 AM</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td></td>
<td><strong>Topic: “Nairuby Community” By Bernard Banta</strong></td>
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<tr>
<td></td>
<td>Bernard Banta is currently the CTO and Co-founder at Finplus. Banta is a computer scientist and an entrepreneur. He is passionate about technology and how it can be used to leverage and transform Africa in the way we live, work, play and govern. In his spare time, he'll often preside over executive and media talks on his pet subjects of entrepreneurship, innovation and transformation using technology. When it comes to building, his ultimate goal is to make the world a better place. He is an entrepreneur and an engineer on the bleeding edge of technology. He is also the Co-founder of Nairuby community and Co-organizer of Ruby Conference Kenya</td>
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<tr>
<td>9:30 AM-10:15 AM</td>
<td>Keynote</td>
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<tr>
<td></td>
<td><strong>Topic: “Impact of Contributing to Open Source” By Laura Kirby</strong></td>
</tr>
<tr>
<td></td>
<td>Laura is a software engineer at IBM Aspera. She is currently working on a full-stack web application that processes and manages big data. In her spare time, she volunteers for Bridge Foundry, a non-profit that aims to diversify the tech industry. When she isn’t thinking about code, she can be found practicing gymnastics or hosting friends for board games</td>
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<tr>
<td></td>
<td><strong>Abstract:</strong></td>
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<td>I became involved with Bridge Troll through first attending a RailsBridge workshop. I later volunteered and helped teach at RailsBridge workshops. Once I started to become familiar with Ruby on Rails, I began contributing to the Bridge Troll source code. The community of people working on open source code are extremely friendly and helpful. I have found that working on open source projects it is a good place to learn about industry standards, learn to code collaboratively, gain insight on new approaches, receive mentorship and mentor others.</td>
</tr>
</tbody>
</table>
Schedule
Thursday 25th July, 2019

10:15 AM To 10:45 AM
Vishal Chandnani
Def Method Speaker
Topic: Debug Hard: Ruby String Library Methods and Underlying C Implementations

Vishal spent most of his childhood in Dubai, UAE. He earned his Bachelor’s degree in Electronics and Telecommunications Engineering from Pune University (India) and his Master’s degree in Electrical Engineering from Syracuse University. Vishal started his professional career at Lucent Technologies (Bell Labs Innovations), where he developed and supported software for CDMA wireless communication systems. Prior to joining Def Method, Vishal worked at The Boeing Company, where he developed and supported software for the US Government Intelligence Community. Vishal enjoys going to the beach and loves family vacations.

Abstract
What if the Ruby String library ‘reverse’ method or its underlying C implementation had a bug? What if it produced unexpected results with certain types of inputs? e.g. strings with Unicode characters. How would you catch and fix such a bug? How would you explain the unexpected results?

10:45 AM To 11:15 AM
Tea Break

11:15 AM To 12:00 PM
Raounak Sharma
@Raounaksharma
Namyata
Topic: World of CLI (Command Line Apps) with Ruby

I am in the field of Web-development for past 3 years and I am loving it. Currently, I am a pursuing my under graduate in Computer Science and working as a software developer in a company (Namyata). I provide services in Web-development and DevOps. When I am not coding you will probably find me on a football field.

Abstract
Ever wonder how to handle the problem when you need to build a small solution as an add-on to a big project in a short time. Want to see how CLI apps can serve us in this situation? How CLI apps can increase your width of solving engineering problems.
## Schedule

**Thursday 25th July, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>12:00 PM</td>
<td><strong>Denis Sellu</strong></td>
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<td></td>
<td><strong>CookiesHQ</strong></td>
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<tr>
<td></td>
<td><strong>Speaker</strong></td>
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<td></td>
<td><strong>Topic:</strong> What does a coconut and serverless have in Common</td>
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<tr>
<td>12:00 PM</td>
<td>I’m a Coconut connoisseur; Coconut doesn't ask questions, Coconut understands. During the day I solve problems at CookiesHQ, where I’ve been doing so for just over four years.</td>
</tr>
<tr>
<td>12:45 PM</td>
<td><strong>Abstract</strong></td>
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<td>AWS Lambda has answered &quot;yes&quot; to the question &quot;Can Rubyists come out and play&quot; whenever Serverless knocked on the door. I want to catch up any Rubyists who are not yet familiar with the technology, so it can be another tool for the toolbox. Like coconuts, Serverless is full of delicious surprises.</td>
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<tr>
<td>12:45 PM</td>
<td><strong>Lunch Break</strong></td>
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<tr>
<td>2:30 PM</td>
<td><strong>Sigu Magwa</strong></td>
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<td><strong>Podii</strong></td>
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<td></td>
<td><strong>Topic:</strong> Building Softwares From Your Workstation to the Client</td>
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<tr>
<td>2:30 PM</td>
<td>An Open Source enthusiast who is a remote volunteer developer and open source community at AgileVentures. Currently a member of Podii -software company based in Kisumu Kenya. Previously Worked remotely as a coach and developer at the Swedish based academy and company Craft Academy. Been working with Ruby on Rails for a while and has a growing interest I Elixir and Phoenix.</td>
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<td>What are the intentional efforts community leaders can put to build a community, maybe we are blocking everyone else from joining the community and if so is there something we can do to welcome them back? As a community member, what roles do you play in this?</td>
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Schedule
Thursday 25th July, 2019

Roundtable
2:45 PM
Open source in Entrepreneurship
Moderator: “Bernard Banta”
Panelists
Laura Kirby, Sigu Magwa, Prathamesh Sonpatki, Amr Abdelwahab,

To
4:00 PM

Break

4:15 PM
To
4:30 PM

Day 1 Closed
To
5:00 PM

Closing Remarks
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<td>8:30 AM To 9:15 AM</td>
<td>Prathamesh Sonpatki: State of the Art of Managing Assets in the New Rails</td>
</tr>
<tr>
<td>9:15 AM To 10:00 AM</td>
<td>Laura Kirby: Building a Customer Facing Analytics</td>
</tr>
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</table>

Prathamesh Sonpatki
@cha1tanya
Memory.ai

**Topic:** State of the Art of Managing Assets in the New Rails

Prathamesh Sonpatki is senior backend consultant at Memory.ai. Previously he worked as Director at BigBinary, a distinguished web and mobile app development firm specializing in Ruby on Rails, React, and React Native. He blogs regularly on prathamesh.tech about topics related to Ruby, Rails and Emacs.

**Abstract**
With Rails 6 declaring that webpacker will be the default way of how the JavaScript should be written in new apps, we have lot of questions to answer. Why should one switch to Webpacker in the first place? What about my old code? In this talk we will unravel this mystery.

Laura Kirby
@kirby_laura
IBM Aspera

**Topic:** Building a Customer Facing Analytics

Laura is a software engineer at IBM Aspera. She is currently working on a full-stack web application that processes and manages big data. In her spare time, she volunteers for Bridge Foundry, a non-profit that aims to diversify the tech industry. When she isn’t thinking about code, she can be found practicing gymnastics or hosting friends for board games.

**Abstract:**
My team at Aspera IBM created a real-time data analytics platform using Kafka, Cassandra and Ruby on Rails. Cassandra can keep up with the high frequency of writes. Kafka can stream data from our daemon to our Rails Application. We now show our customers real-time & highly detailed historical data.
Schedule
Friday 26th July, 2019

10:15 AM To 10:45 AM
Amr Abdelwahab
@amrabdelwahab
Modomotocurated Shopping Group
Speaker
Topic: Deconstructing a hype: What People think is wrong with Ruby?

An African Egyptian native who crossed continents to work with his passion in digital environments. Amr’s interests span technology, tech-communities, politics and politics in tech, all enriched through various software engineering roles in Egypt, Hungary and Germany.

Abstract
Have you heard the so called "senior engineers" complaining about Ruby recently? Attended a Conference with a talk titled "Ruby is dead"? Did your team decide to ditch ruby?
I took it upon myself to talk to many people in the ruby sphere and try to figure out where these feelings stem from

10:45 AM To 11:00 AM
Tea Break

11:00 AM To 11:45 AM
Purity Maina
@bantu_bytes
Lipalater
Topic: Blitzscaling with Ruby for Software

Purity Maina is a software engineer who has been building Fintech products for the African market for the past 4 years and loving the journey. She has worked with notable companies such as World Bank, Kenya Films Board and Kenya Tourism Board to build more inclusive products for the market. She is currently working with Lipalater as a lead software engineer. Away from her computer, Purity will either be teaching children how to write code or on the lookout for collectable art pieces.

Abstract
Blitzscaling is a specific set of practices that prioritizes speed over efficiency allowing companies to go from "startup" to "scale up" at a furious pace. How can software engineers build scalable products on stable infrastructure when the business puts speed over efficiency?
**Schedule**

**Friday 26th July, 2019**

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**Paul Ogudah**

@kamalogudah  
Andela  
Speaker / Case Study  

**Topic:** One Day It Will Make Sense.

I was supposed to be a Spatial Planner, but now I code. I will still code, even if I go back to Spatial Planning. I speak in Ruby, Crystal (It is still Ruby), some Python, Elixir (because Erlang is strange), Javascript, and Haskell. In my spare time I am a Faux Chef trying to understand the science of Molecular Gastronomy through watching cooking shows. I believe supporting Manchester United gets you close to heaven.

**Abstract**

In any craft, being a novice is filled with a lot of uncertainties, you got this idea of what you want to be, but there is a lot that will come your way in terms of obstacles. This talk is aimed to show beginning programmers of what stands between them and their dreams, and how to get there.

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**Stella Maris**

@StlMaris  
Sokowatch  

**Topic:** How To Make Your Applications Secure

Stella is backend engineer at sokowatch. She also enjoys contributing to open source projects and has been a contributor to organizations such as AgileVentures EBWiki and PublicLab. She is a coach at Rails Girls and really enjoys sharing what she knows with young ladies eager to learn programming. She is a free spirit, enjoys outdoor activities such as hiking and all adrenalin rushing activities. Did she mention that it’s her first time speaking at a conference?

**Abstract**

Security is a major concern for any company involved in software development. This must be taken into account right from the beginning of a project. It is important for software developers to understand the kind of threats/vulnerabilities and application is likely to encounter and how best to prevent them. This presentation will give an overview of some of the breaches and how to prevent them.

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**Lunch Break**

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Schedule
Friday 26th July, 2019

Itoyanagi Sakura
@spacepiratellc
Space Pirated, LLC
Speaker

Topic: Documentation And Multiline
Ruby committer, RDoc main maintainer, and Ruby core tools contributor.

Abstract
Ruby 2.7 will be released with improved IRB. It has a multiline editing feature and displays documents like IDE. I'll talk about the technical background of it and Ruby 3’s documentation design.
Please watch the demo video: https://cache.ruby-lang.org/pub/media/irb_improved_with_key_take2.mp4

Marvin Hosea
@marvin_hosea
AppsLab

Topic: Agile + DevOps and You
Marvin Collins Hosea is the CEO and Founder at Apps:Lab Limited. He studied Computer Science at Moi University and after working for six companies, he quit his job to run Apps:Lab limited full-time. He builds awesome stuff with PHP-Laravel, Golang, and Java at Apps:Lab. He is also an advocate for Docker and DevOps practices. Apart from working at Apps:lab he is passionate about building and impacting tech communities and organizes Androi254 and DroidConKE. Off tech and work, He delivers food at LetaFood and a failed rapper who love street food.

Abstract
In this talk, I will discuss what is DevOps and Agile development, the implication of Agile key principles to DevOps and tech business and how developers can package themselves as DevOps around Agile methodology.
Schedule
Friday 26th July, 2019

3:30 PM To 4:15 PM
Sigu Magwa
@S_igu
Podii
Topic: Building the Software Developer Community, Diversity and Inclusion
An Open Source enthusiast who is a remote volunteer developer and open source community at AgileVentures. Currently a member of Podii-software company based in Kisumu Kenya. Previously Worked remotely as a coach and developer at the Swedish based academy and company Craft Academy. Been working with Ruby on Rails for a while and has a growing interest I Elixir and Phoenix.

Abstract
What are the intentional efforts community leaders can put to build a community, maybe we are blocking everyone else from joining the community and if so is there something we can do to welcome them back? As a community member, what roles do you play in this?

4:15 PM To 4:30 PM
Break

4:30 PM To 5:00 PM
Closing Session
Ruby Chairman, IHub Representative.
Introduction

You’ve got a head full of ideas when it comes to creating a web app, but where do you start? In this Ruby workshop, you’ll learn HTML, Rails, and GIT basics that will get you moving the right direction in your app development process. In this workshop, you will learn the basics of programming in Ruby - enough to play around with arrays, hashes, control structures, and methods. You will also be able to build and deploy a simple Rails app (“Twitter clone”) to Heroku.

Objectives

♦ Build a simple object-oriented Ruby program
♦ Differentiate arrays and hashes
♦ Apply loops to manipulate collections
♦ Create and implement custom methods and classes
♦ Explain the MVC structure and differentiate between models, views, and controllers.
♦ Build a simple Rails app from scratch
**Workshop - Schedule**

**Saturday 27th July, 2019**

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**Morning**

**Introduction to Ruby**
- Strings
- Arrays and hashes
- Control flows
- Variables
- Methods
- Classes
- Build a simple object-oriented Ruby program

**Introduction to Ruby on Rails**
- Creating Your First Rails Application
- Rails Architecture
- Rails Controllers and Views
- Rails Models and ActiveRecord

This is just a rough guideline, not a mandate. Some steps you'll go over and some you'll go under. It'll all work out by the end of the day. Probably
Workshop - Schedule
Saturday 27th July, 2019

Afternoon

Build a simple project (app from scratch and deploy it on Heroku)

Requirements
We’re going to be working with:

- Ruby 2.1 or 2.2 installed via RVM (Mac or Linux) or Rails Installer (Windows)
- Rails 4.2.x
- Bundler
- SQLite
- The text editor of your choice

Everything should be set up the night before during our install-fest. Please ensure you have everything working before you show up for Rails Bridge on Saturday.
You can verify that you have everything working by trying this out in your terminal:

```
$ irb
>> 1 + 2
=> 3
>> require "active_support"
=> true
>> exit
$
```

If you can do that, you are probably good to go.
Workshop - Schedule
Saturday 27th July, 2019

Prerequisite & Preparation
Students should be knowledgeable and comfortable in the general ways the World Wide Web works.

No pre-reqs but some pre-course work in the command line and git would be good if you are not familiar. Ideally, understand how to navigate to a folder using the command line.

Review these resources before class
- 15 minutes to learn Git - http://try.github.io/
- Installfest. This is a set of step-by-step instructions for installing Ruby, Rails, and other important tools on Mac, Windows, or Linux computers - http://installfest.railsbridge.org/installfest/installfest

Preparation
Laptop preferably a Mac but PCs welcomed. - Text editor, such as Sublime Text: http://www.sublimetext.com/ - Download/Install Ruby and Rails: http://railsinstaller.org/
Workshop - Schedule
Saturday 27th July, 2019

Working Effectively & Efficiently

We highly recommend you do the following:

- Bring up your terminal and open 2 tabs:
- One is for regular terminal stuffs
- One will be for IRB (a.k.a. Rails console). We'll explain later.
- Open your browser fresh or hide any windows you already have open.
- Bring up one window with two tabs
- One for this content
- One for interacting with your app.
- Open your text editor and do not ever close it. We're not quitters.
- Hide all extra applications. Turn off Twitter, IM, and all other distractions.

Workshop Facilitators

Cess Wairimu
Open Source Enthusiast, Rails Girls Nairobi Organizer

Prathamesh Sonpatki
Senior backend consultant at Memory.ai

Stella Maris
Software Engineer at Sokowatch

Raounak Sharma
Web Developer at Namyata
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