

Ruby Association Travel Grant Attendance Report - Emma Beynon

In November 2016 I travelled to Matsue, Japan to attend the RubyWorld Conference 2016 thanks to a travel grant which was kindly awarded to me by the Ruby Association. I'm a Junior Developer at the Government Digital Service which is based in London, UK. We are responsible for leading the digital transformation of the UK government. I work on one of the teams that supports GOV.UK, which is the main place for citizens to find government services and information, and it is mostly built using Ruby and Rails. I joined the Government Digital Service in April 2016 and this is my first software development job. Previously I worked in marketing for about 6 years. In my last role at a small start-up I was exposed to programming after working closely with software developers there. They encouraged me to learn programming myself and I found that I really enjoyed it. Eventually I decided that I would enjoy programming full-time much more than marketing, and made a career change into software development. I attended 'Makers Academy' in London, which is a 3-month intensive coding course. During that time I learned Ruby, Javascript, Rails and most importantly the core skills of being a developer. Doing this course enabled me to find my current job.

I decided to apply for the RubyWorld travel grant after seeing it posted in the Ruby Talk mailing list. As a relatively new developer, I haven't been to many conferences yet, and I thought this would be a great opportunity to attend a well-established conference dedicated to the programming language I use. I also felt that RubyWorld would enable me to learn more about the language, discover how other companies are using it, and meet Rubyists from other countries. Therefore I was thrilled to be awarded the grant and looked forward to the experience. RubyWorld didn't disappoint; over the course of two days I listened to many fantastic talks. I'd like to share with you some of my favourites from the conference.

I arrived on day 1 of RubyWorld to a keynote speech from Yukihiro 'Matz' Matsumoto, the creator of Ruby. He started by taking us through the original principles of Ruby; development efficiency, productivity, programmer happiness and a focus on humans. He warned us against "karoshi", the Japanese phenomenon of death by working too hard, and emphasised that as programmers we should be lazy. It was great to revisit Ruby fundamentals such as DRY (Don't Repeat Yourself) and duck typing, and remind ourselves of what Ruby has made possible for programmers. I was honoured to meet Mr Matsumoto at a reception hosted at the end of the first day, which was one of my highlights from the conference.



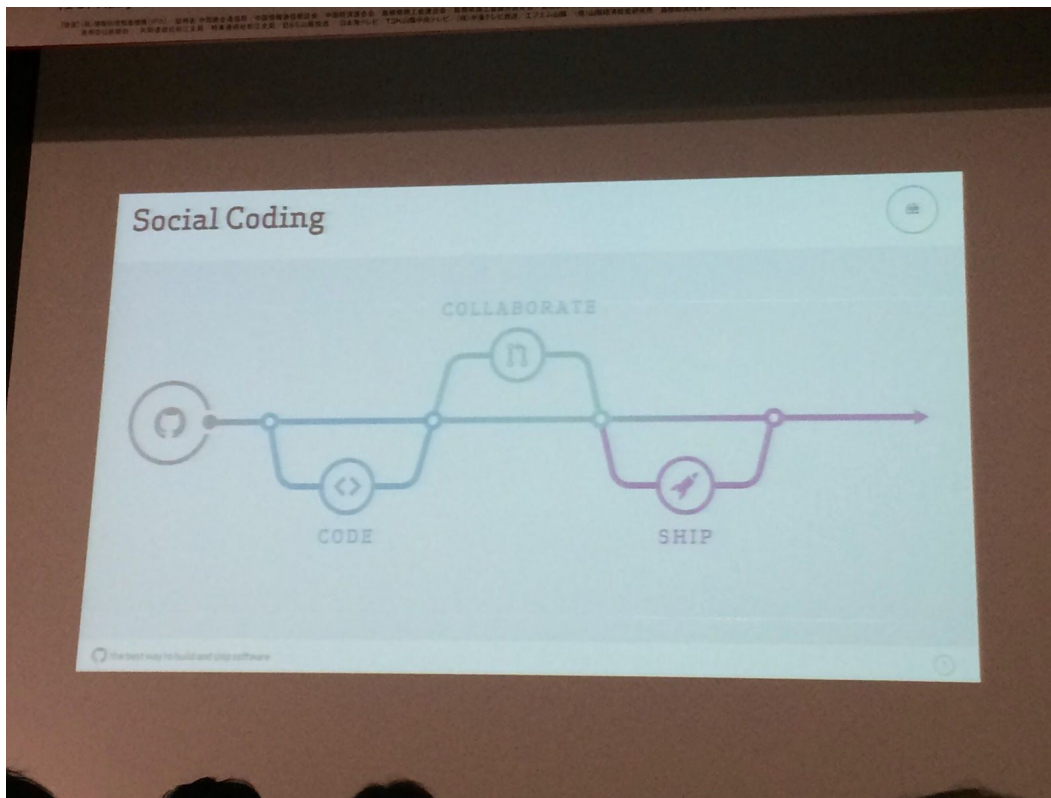
In the afternoon Kenta Murata from Recruit Holdings talked to us about machine learning and data science. This is not an area of programming that I have much experience with, so I found this talk particularly interesting. Kenta discussed the current place of Ruby within data science, which is behind Python and R. While there are several relevant libraries available in Ruby, they tend to be much slower and less integrated than Python libraries. He believes that without serious intervention, Python may take Ruby's market share as companies place more and more importance on data science. In order to counter this, Kenta proposed that Ruby data science libraries should be unified, and that the resources available to Python and R should be translated to Ruby libraries. He is already working on this, and made a call for contributors to help him achieve this goal.

The first day closed with Tetsuya Hirota who gave an inspiring talk about teaching programming to children in a small Japanese town called Makinohara. Tetsuya wanted his daughter to learn how to program, but found that classes were only available in larger cities. So, he decided to start his own classes to teach his daughter and other children too. He detailed some of the issues he had to overcome, such as worrying that other children wouldn't want to do it, and a concern that he had never taught before. Finding a suitable venue was also a challenge, as many local places didn't have suitable wifi provision, or would cost a lot of money. Fortunately, Tetsuya is now running 2-hour classes twice a month for up to 5 students, and they've learned so quickly that they are now preparing an entry to a Smalruby competition. It was wonderful to hear this story and see a fantastic example of the Ruby community spirit in action.



Day 2 opened with a keynote address from Daisuke Horie and Edward Thomson of GitHub. Daisuke explained the idea of GitHub as a social network for developers. Using GitHub, developers can share and collaborate on software with each other, also known as 'social coding'. This approach helps facilitate open source work, and as more and more open source projects have moved to GitHub, it is now a central community for the practice. Previously, developers had to ask permission to contribute to a project. Now, they're able to make their own copy of a project, familiarise themselves with the code and contribute when they feel ready to. Edward then spoke about his own experience working at Microsoft, where open source culture used not to exist at all. The organisation had concerns that malicious code could be checked in, and didn't see the value of outside collaboration. After

acquiring a small company that used open source software heavily, Microsoft started experimenting with open source by making some of its code available on GitHub. It is now one of the organisations with the most open source contributors on GitHub. Microsoft also strongly encourages internal open source, also known as “inner source”, whereby developers on different teams contribute to each other’s internal projects.



Kao Chien Lung from 5xRuby in Taiwan finished day 2 with a talk about introducing Ruby to local campuses. He explained that Ruby is only really popular with startups in Taiwan, and there was a feeling that languages such as Java would be more useful for students to learn. 5xRuby was founded to challenge this assumption and provide Ruby training courses and host events in order to develop the local Ruby community. There were difficulties in achieving this; he didn’t have any teaching qualifications, and teachers weren’t convinced that it was a valuable subject for students to learn. However 5xRuby came up with several strategies to overcome this. They approached students directly with an offer of free short courses, and hosted events like Rails Girls to raise awareness. Eventually teachers started to trust them more, and allowed 5xRuby to run a class, even though no funding was made available. They taught a small group of students to begin with, but later evolved to a class of over 30 students. After proving their value, more and more schools have asked them to provide classes and they have now taught over 1000 students. In order to make the project financially viable, 5xRuby hire some of their students and train them to become professional Rubyists to work on real world projects. The company now has 16 employees, of which half are former students.

It was a pleasure to hear from so many great speakers at RubyWorld. I'm really glad I attended the conference, and I hope to visit again in the future. Thanks once more to the Ruby Association for offering me this opportunity.