# **DNS-OARC Software Engineer Job Description**

## Mission:

Perform software development tasks required to maintain and enhance OARC's projects, tools and services. Implementation responsibility for projects to develop new tools and services. Support other OARC staff in setting and raising high standards of innovation and support of OARC activities. Play a key role in growing OARC as a sustainable autonomous, neutral organization.

## **Specific tasks:**

- 1. Management and support of DNS-OARC's wide range of software-based tools and services, including but not limited to:
  - Maintenance and development of open-source DNS software toolset for OARC's community
  - Ongoing development and support of OARC's multi-server collaboration and data gathering platforms
  - o Point of contact and assistance for OARC members and users requiring technical support
  - Support and Development of OARC data-collecting software
- 2. Development of new OARC software-based tools and services
  - Specification and implementation of new member- and public-facing tools and service projects
  - Maintain framework for common support of new projects
  - Work in close co-operation with OARC Staff to ensure on-target delivery of new services

#### 3. Other functions:

- Work in close co-operation with OARC's Engineering team to ensure high availability of all services
- Regular meetings with other team members.
- General assistance to OARC Staff, Board and Members, and other tasks in support of DNS-OARC activities and projects as required.

## **Role Requirements:**

- 1. Experience:
  - Use of different UNIX environments (more than just GNU/Linux or OS X)
  - Serving high-value stakeholders in a technical service environment
- 2. Required Skills:
  - Understand DNS and other network protocols at protocol level
  - C programming language, advanced level (threads, mutex, memory management, endian, etc)
  - Compiler and build systems (such as GNU make)
  - o git usage and git flow work-flow (forks and feature branches)
  - Use of distributed cloud-based remote collaboration tools
  - Flexible self-starter who thrives in a less structured startup environment
  - Motivated to work in a nonprofit, public-benefit culture
  - Ability to work unsupervised as part of a geographically-distributed team
  - Excellent communications skills both in person, in writing, and via electronic media

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## 3. Desirable Skills:

- Previous experience of open source projects
- Knowledge of other programming languages, such as C++, Go and Python
- Previous experience of building web sites and/or web-based tools
- Familiarity with relevant Internet protocol standards

## 4. Location:

- Most of this role will be on the same remote-team work-from-home office basis as all other OARC positions
- Travel several times a year to OARC and other industry meetings in the US and internationally

## 5. Contracted Hours:

o At least 120 hours per month

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