



# PROGRAMMER / SOFTWARE DEVELOPER CONSULTING-CONTRACTOR OPPORTUNITY

The Open Voice Network (OVON), an open-source community of the Linux Foundation, is dedicated to the development of technology standards and guidelines that will make the emerging world of voice assistance worthy of user trust. The Technical Committee of the Open Voice Network has chartered a Technical Committee Working Group to explore and recommend potential standards for **voice-agent-to-voice-agent interoperability**.

The **Programmer / Software Developer** will assist in the design, implementation, testing, documentation, and demonstration of “enhancements” that will enable agent-to-agent interoperability. To do so, the Programmer / Software Developer will work both independently and collaboratively with teammates from around the world in regularly scheduled conference calls.

The Programmer / Software Developer will execute the below deliverables to the Open Voice Network as a consulting independent contractor and receive compensation through a Contractor Services Agreement with the Linux Foundation.

The Programmer / Software Developer may execute deliverables in any location where there is an internet connection sufficient for reliable video conferencing. Team meetings are generally scheduled between the hours of 15:00 and 19:00 CET. Conferencing and collaboration tools will be provided to enable connection with Open Voice Network teammates worldwide. No travel will be expected.

The Linux Foundation is an equal opportunity employer.



## DELIVERABLES

Consultative and Support services that will include the design, implementation, testing, documentation, and demonstration of the first two of an estimated six “enhancements” that will enable agent-to-agent interoperability. This will include:

- ▲▲ Contributions as to design and development suggestions for the desired enhancements within weekly virtual one-hour team meetings;
- ▲▲ The design, creation, testing, and demonstration of software prototypes for the desired enhancements that will enable voice-agent-to-voice-agent interoperability.
- ▲▲ System-level documentation for each enhancement within the Open Voice Network GitHub repository;
- ▲▲ Demonstration of each enhancement to OVON team members, with revisions as suggested by team and outside reviewers.

The Programmer / Software Developer will report to a member of the Architecture Work Group and representative of an Open Voice Network sponsor company. Deliverables and deliverable artifacts will receive final approval from John Trammell.

## EVALUATIVE MILESTONES

Due dates may be adjusted to reflect the success of earlier deliverables. Criteria for acceptance of each deliverable include:

- a. Robustness of code
- b. Completeness of documentation
- c. Reusability of code
- d. Completeness of functions implemented by code



No.	Enhancement Name	Tentative Due Date
1	<i>Install communications system, integrate two voice agents.</i>	<i>2021.12.15</i>
2	<i>Integrate VRS software, demonstrate explicit request of a voice agent by its invocation name.</i>	<i>2022.01.15</i>
3	Develop, integrate, demonstrate software to switch between voice agents.	2022.02.15
4	Develop, integrate, demonstrate software to implicitly invoke a voice agent.	2022.04.15
5	Develop, integrate and demonstrate software to share data and context between two voice agents.	2022.06.15
6	Develop, integrate, and demonstrate software to present remote voice agents using another persona.	TBD

***Focus of this engagement:***

**REQUIREMENTS**

- ▲▲ Working familiarity with collaboration tools: GitHub, Slack, Zoom, Google Workspace.
- ▲▲ Five years working with operating systems/development systems/programming languages.
- ▲▲ At least two years of experience developing voice agents (including speech recognition, speech synthesis, dialog management, and natural language processing).
- ▲▲ Experience integrating existing software modules and systems and demonstrating the resulting system.
- ▲▲ Experience designing, writing, testing, documenting, and demonstrating code using Rust or other development environment.
- ▲▲ English-language communication (speak, write) skills, and the ability to work with an international team of designers and developers.



## COMPENSATION

This opportunity is structured to be a part-time consulting engagement with the Linux Foundation, as provided by an independent contractor. Phase One, which is described here, is expected to run through January, 2022. Compensation will be structured in accord with expertise.

