February 26, 2016

To whom it may concern:

Since Spring of 2013, Bertrand Stivalet has been a member of the NIST Software Assurance Metrics And Tool Evaluation (SAMATE) team. I worked closely with Bertrand as his colleague and project leader. During these three years, he gained experience in security research and application security assessment, made important contributions to several areas of the SAMATE project, and came up with and implemented several novel ideas.

Mr. Stivalet contributed greatly to the Static Analysis Tool Exposition (SATE), a large scale study of static analysis tools. He played a key role in preparation of SATE test cases and analysis of tool results. In particular, Mr. Stivalet characterized many CVEs - exploitable vulnerabilities - in large software, conducted code review to evaluate thousands of static analysis tool warnings, developed tools for automated analysis of warnings, developed tools for managing SATE data, and co-wrote the SATE report. Based on SATE work, Bertrand made several impactful and informative presentations at the SATE experience workshop and other venues.

Mr. Stivalet led the design and development of the PHP test case generator that produced the PHP vulnerability test suite – a collection of over 40,000 PHP programs covering the most common security weakness categories. Since its release in the Fall of 2015, the test suite has been used by several researchers for testing software assurance tools. Currently, he is leading the design and development of the C# test case generator.

Mr. Stivalet came up with the idea of and implemented "A bug a week" challenge – an innovative way to bring attention to security weaknesses and train students, developers, and others in finding weaknesses and writing better code.

During the last year, Mr. Stivalet was the lead author of two conference papers. One of the papers received the best paper award.

To summarize, Mr. Stivalet has broad computer science background, excellent programming skills in several programming languages, experience in security research and security assessment, and very good technical writing skills. Additionally, he is an innovative researcher, a team player, always produces work of very high quality, and is a very hard working and reliable person.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Vadim Okun
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