Position: Postdoc in self-managed and power-efficient stream processing systems
Where: Boston University, Department of Computer Science
Duration: 1 year initial contract with possibility for extension
Start date: As early as Jan 1 2022
Salary range: $70K - $80K
Application review starts: November 22 2021

We invite applications for a postdoc position in the Department of Computer Science at Boston University. You will work closely with Prof. Vasiliki Kalavri, Prof. Jonathan Appavoo, and other faculty at the BU Systems group and the BU Red Hat Collaboratory.

Our research spans various areas in systems, including operating systems, big data platforms, stream processing, cloud computing, machine learning and automation, and storage systems, and is guided by open-source software principles and practices. In this position, you will design, develop, analyze, and evaluate self-scaling and power-efficient stream processing systems, exploiting knowledge across the software stack to direct and control low-level optimizations.

You will also have the opportunity to engage in teaching activities at the Department of Computer Science and receive training in course organization and development. You will mentor undergraduate and graduate students, supervise student research projects, and participate in seminars and events organized by the BU Red Hat Collaboratory.

The postdoc position is initially offered for 1 year, with possibility of renewal for up to 3 years.
Applications will be reviewed on a rolling basis starting November 22 and until the position is filled.

Requirements:
- PhD in Computer Science, Computer Engineering, or closely related field.
- Strong academic record with publications and presentations at top-tier systems conferences and/or journals.
- Excellent oral and writing English communication skills.
- Excellent programming skills in one or more of the following languages: C/C++, Java, Rust.
- Research experience in one or more of the following areas: Operating Systems, Stream Processing Systems / Streaming Data Management, Big Data Systems, Cloud/Distributed Systems
- (optional) Experience with open-source software development practices and/or contributions to open-source projects.
- (optional) Teaching experience.

Responsibilities:
- Conduct fundamental and experimental scientific research.
- Publish scientific papers in international conferences and journals.
- Present your work in seminars, workshops, and Collaboratory events.
- Support the CS Department's teaching mission by assisting in organizing and teaching courses at the undergraduate and graduate levels.
- Mentor graduate and undergraduate students, propose and supervise student research projects.

- Establish collaborations with BU faculty and engineers at the Red Hat Collaboratory.

How to Apply

To apply, send an email to Prof. Vasiliki Kalavri (vkalavri@bu.edu) and/or Prof. Jonathan Appavoo (jappavoo@bu.edu), with subject "*Postdoc application BU Systems group 2022*" and include the following materials :

- A detailed CV, including a list of publications.
- A 2-page research statement.
- A list of referees (we will contact referees for shortlisted candidates only).

About Boston University and the Department of Computer Science:

Boston University is situated centrally in Boston, a vibrant city with an enormous range of options for industrial and academic collaboration around technology. BU is committed to nurturing and supporting interdisciplinary and cross-departmental research. The Department of Computer Science has research strengths in data mining, databases, graphics, image and video computing, machine learning, natural language processing, networking, distributed systems, operating systems, software design and implementation, real-time systems, security and cryptography, and theory of computation and algorithms. In addition, members of the Department collaborate closely with faculty across the university including mathematics and statistics, computer engineering, mechanical engineering, biology, earth and environment, economics, law, medicine, among others. Additional information about the Department is available at http://www.bu.edu/cs.

About the BU Red Hat Collaboratory:

A partnership between Red Hat and Boston University, the Red Hat Collaboratory connects BU faculty and students with industry practitioners working in open-source software communities. Day to day, the BU Collaboratory team works closely with the Red Hat Research Team, growing the community of BU and Red Hat collaborators. The Collaboratory aims to advance research focused on emerging technologies in a number of areas including operating systems, cloud computing services, machine learning and automation, and big data platforms. More information about the BU Red Hat Collaboratory is available at https://www.bu.edu/rhcollab/.