Computer Science majors will get real-world software development experience thanks to a National Science Foundation Grant for $299,797 awarded to Jackson State University to establish, under Dr. Hyunju Kim’s direction, an Open Source Software community run by computer science majors.

Kim is Associate Professor in the Department of Computer Science. She said the award will be distributed over three years, beginning Sept. 1, 2013, enabling JSU to educate computer science majors through real-world software development activities and produce a well-educated and well-trained workforce.

The project further contributes to student learning in the areas of engineering, analyzing and understanding existing code, software solution design, people and project management, and communicating with end users and clients.

More specifically, it will provide:

- A repository and knowledge base of student development projects and an incubator for further OSS developments.
- Workspaces and opportunities for real-world software development in an educational environment.
- A virtual classroom for computer science majors at any level.
- Collection and analysis of various educational and research data from the community.
- Development of software products for the university, producing positive impacts on the university as well as computer science education.

The proposed SOSS model does not require a major change to the curriculum and can be easily ported to other educational institutions because it is itself an OSS project.

“The products developed by the SOSS will be distributed and used by the JSU family, producing thereby positive impacts on JSU and computer science education,” Kim says.

The project also has a broader impact by training underrepresented Science, Technology, Engineering and Math students, she adds.

“About 95 percent of the undergraduate computer science majors are African-American. They will experience software developers’ daily tasks within the SOSS, which will produce better-equipped and trained graduates.”

Kim is the third faculty member within Cohort I of JSU’s Academy for Research and Scholarly Engagement to receive a grant award. Launched in the fall of 2012, the academy provides researchers with support and coaching to develop their ideas into funded research projects.

First was Dr. Olga Osby, social work professor, for $220,000 for American Grandfathers in Community Engagement and Family Stabilization, research on the role of African American grandfathers play in child rearing.

Dr. Yu-Chun Kuo, Assistant Professor of Instructional Design and Development, received the 2013 Association for Continuing Higher Education Alex Charters Research Grant of $1,000 to help fund her research related to adult learners.