Leveraging Energy-Aware Programming Techniques to Build Energy-Efficient System Software

Timo Hönig

Examining and optimizing system software for low energy demand is a challenging task. However, it is of ecological, economical, and technical importance to improve the energy footprint caused by program code. Deficiency in adequate tooling support is a major issue, especially for system architects and programmers who build energy-aware computing systems. The talk "Leveraging Energy-Aware Programming Techniques to Build Energy-Efficient System Software" discusses today’s best practices in energy optimization of software, and shows how software developers benefit from recent research on energy-aware programming techniques to reduce the energy demand of their program code.

Timo Hönig is a Ph.D. candidate at Friedrich-Alexander University Erlangen-Nürnberg (FAU) and a research fellow at the System Software Group at FAU. He previously worked at IBM Research in the embedded hardware development group and at SUSE Linux GmbH as Senior Software Engineer. With almost a decade of experience in systems research and systems programming, his work at the System Software Group at FAU focuses on energy-aware programming and energy-aware systems. Based on Timo's broad engagement in the open source community he contributes to open-source projects and he writes articles for the Linux Magazine.