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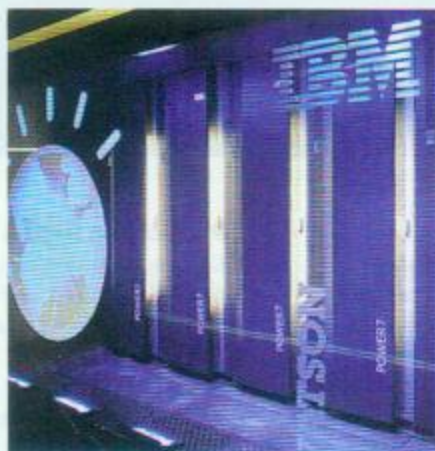
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How the embeddability of Lua impacted its design.

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Domain-specific languages bridge the semantic gap in programming.

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A discussion with Nico Kicillof, Wolfgang Grieskamp, and Bob Binder.

ACM Case Study



Articles' development led by [acmqueue.org](http://acmqueue.org)

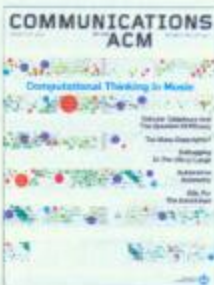
## Contributed Articles

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The composer still composes but also gets to take a programming-enabled journey of musical discovery.  
By Michael Edwards

- 68 **A Decade of Software Model Checking with SLAM**  
SLAM is a program-analysis engine used to check if clients of an API follow the API's stateful usage rules.  
By Thomas Ball, Vladimir Levin, and Sriram K. Rajamani

- 77 **Searching for Jim Gray: A Technical Overview**  
The volunteer search for Jim Gray, lost at sea in 2007, highlights the challenges of computer-aided emergency response.  
By Joseph M. Hellerstein and David L. Tennenhouse (on behalf of a large team of volunteers)

- VE** **The Case for RAMCloud**  
With scalable high-performance storage entirely in DRAM, RAMCloud will enable a new breed of data-intensive applications.  
By John Ousterhout, Parag Agrawal, David Erickson, Christos Kozyrakis, Jacob Leverich, David Mazieres, Subhasish Mitra, Aravind Narayanan, Diego Ongaro, Guru Parulkar, Mendel Rosenblum, Stephen M. Rumble, Eric Stratmann, and Ryan Stutsman

**About the Cover:**

An algorithmic approach to music composition has been in evidence in Western classical music for at least 1,000 years, says Michael Edwards, who chronicles the history of algorithmic composition before and after the dawn of the digital computer beginning on p. 58. Illustration by Studio Tonne.

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A private overlay may ease concerns over surveillance tools supported by cellular networks.  
By Stephen B. Wicker

- VE** **Workload Management for Power Efficiency in Virtualized Data Centers**  
Power-aware dynamic application placement can address underutilization of servers as well as the rising energy costs in a data center.  
By Gargi Dasgupta, Amit Sharma, Akshat Verma, Anindya Neogi, and Ravi Kothari

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