



## News

Press Releases  
Event Announcements  
CCT Weekly  
Grants and Funding  
Student News  
Archived News

## Congrats to Dr. Ram for receiving the SIGPLAN Most Influential PLDI Paper Award

(Source: [sigplan.org](http://sigplan.org))

### Recipients

**Uday Bondhugula, Albert Hartono, J. Ramanujam, and P. Sadayappan**

**2018**

(for 2008) *[A Practical Automatic Polyhedral Parallelizer and Locality Optimizer](#)*

Citation:

“ The PLDI 2008 paper “A Practical Automatic Polyhedral Parallelizer and Locality Optimizer” significantly advanced the power and practical automatic application of polyhedral analysis to automatically determine parallelism and locality improving affine transforms of regular programs expressed as sequences of possibly imperfect loops. The work presented in this paper produced practical implementations that could automatically generate OpenMP parallel programs from sequential nested loops written in C. This inspired a large number of other researchers to further develop polyhedral optimizations based on this approach, like automatic code generation for GPUs and FPGA circuits by high level synthesis from nested sequential loops. The ideas in this paper have proved to be enduring and widely applicable and even to this day keep finding new applications, e.g., for mapping machine learning algorithms to specialized accelerators.

**Publish Date:**  
06-22-2018

