

Seminar 00451: Effective Implementation of OOPLs

1. Intro of organizers
2. Evening discussions - Thursday
3. Demonstrations - tonight
4. Posters - see Frank at this morning's break
5. Overview of meeting
6. Don't forget to write your talk abstract in the book! Send PDF of your slides to Uwe after the meeting.

Daily Themes

- **Monday - Garbage collection, profiling, mobile code**
 - **Evening: Demos**
- **Tuesday - Compilers + JVMs, Optimizations**
 - **Evening: Wine tasting and dinner**
- **Weds - PL Design + Afternoon Hike**
- **Thursday - Call graph construction, Opts**
 - **Evening: Discussion groups**
- **Friday - PL Design, Functional PLs, *other***

Monday, November 6, 2000

9:00-10:00	Hans Boehm: Garbage Collection tutorial
10:00-10:15	questions and discussion
10:15-10:45	*** BREAK ***
10:45-11:15	talk #1: Alex Garthwaite: Making the Trains Run on Time
11:15-11:45	talk #2: Bjarne Steensgaard: Thread-Specific Heaps
11:45-12:00	discussion
12:00	lunch

Monday, November 6, 2000

- 1:30-2:00** **talk #3: Ran Shaham:**
 On the Effectiveness of GC in Java
- 2:00-2:30** **talk #4: Trishul Chilimbi:**
 Using Garbage Collection to
 Implement Cache-Conscious Data
 Layouts
- 2:30-3:00** **talk #5: Aldo Eisma:**
 Packaging Embedded Java Apps
 in IBM VisualAge Micro Edition
- 3:00-3:15** **questions**
- 3:15-3:45** **** BREAK ****

Monday, November 6, 2000

- 3:45-4:15** **talk #6: Jurg Gutknecht:**
Implementing Active Objects on Intel
SMPs
- 4:15-4:45** **talk #7: David Melski:**
Interprocedural Path-specific
Optimization
- 4:45-5:15** **talk #8: Matt Arnold:**
A Framework for Reducing the Cost
of Instrumented Code
- 5:15-5:30** **discussion, wrap-up**
- 6:00** **dinner**

Monday, November 6, 2000

7:30 Demos

Gilad Bracha - Animorphic Smalltalk System

Peter Fritzon - MathModelica - A Literate

Programming Environment for an OO

Component and Equation-based Language

Mark van den Brand - The ASF-SDF

Meta-Environment

Jurg Gutknecht - Active Objects in Oberon

Frank Tip - *JAX*

Uwe Assmann - *Compost* Connectors for Java

Tuesday, November 7, 2000

- 8:30-9:15** **talk #9: Todd Knoblock: A Marmot Overview**
- 9:15-10:00** **talk #10: Cliff Click: Sun's HotSpot Server
Compiler: Experiences and Lessons**
- 10:00-10:30** **** BREAK ****
- 10:30-11:15** **talk #11: Mike Hind: An overview of the
Jalapeno Adaptive Optimization System**
- 11:15-11:45** **Discussion**
- 12:15** **Lunch**
- 1:30-2:00** **talk #12: Etienne Gagnon: SableVM**
- 2:00-2:30** **talk #13: Norman Ramsey: C-- and exceptions**
- 2:30-3:00** *****BREAK****
- 3:00-3:30** **talk #14: Peeter Laud: Object Inlining**
- 3:30-4:00** **talk #15: Mirko Streckenbach: Points-to analysis
for Java**
- 4:30** **Bus leaves for Wine Tasting/Dinner**

Wednesday, November 8, 2000

- 9:00-9:30** **talk #16: Gilad Bracha: Genericity in the Java Programming Language: Key Issues**
- 9:30-10:00** **talk #17: David Bacon: Bit-Level Object-Oriented Programming (BLOOP)**
- 10:00-10:30** **talk #18: Kees Van Reeuwijk: Extending Java with Language Constructs for High-performance Computation**
- 10:30-11:00** **** BREAK ****
- 11:00-11:30** **talk #19: HP Moessenboek: Reflection Using Hierarchical Iterators**
- 11:30-12:00** **Discussion**
- 12:15** **Lunch**

Wednesday, November 8, 2000

**1:30-2:00 talk #20: Tim Budd: Multiparadigm Extensions to
Java**

**2:00-2:30 talk #21: Karel Driesen: On the Predictability of
Java Byte Codes**

2:30 Cake Break

*******Rest of Afternoon for Individual Discussions*******

Thursday, November 9, 2000

9:00-9:20 **Jens Palsberg: Introduction to call graph building**

9:20-9:40 **talk #22: Frank Tip: Scalable Propagation-Based
Call Graph Construction Algorithms**

9:40-10:00 **talk #23: Laurie Hendren: Practical Virtual
Method Calls for Java**

10:00-10:20 **talk #24: Kazuaki Ishizaki: A Study of
Devirtualization Techniques for a Java
Just-In-Time Compiler**

10:20-10:35 **Discussion**

10:35-11:00 ****BREAK****

11:00-11:30 **talk #25: David Wakeling: Compiling Lazy
Functional Languages for the JVM**

11:30-12:00 **12:15** **Lunch**

Thursday, November 9, 2000

1:30-2:00 **talk #26: Nigel Horspool: Implementing Java
Exceptions Efficiently**

2:00-2:30 **talk #27: Arndt Poetzsch-Heffter: Towards
Structuring the Object Store**

2:30-3:00 **talk #28: Florian Liekweg/Uwe Assmann/
Martin Trapp: Heap Analysis on SSA**

3:00-3:30 *****BREAK*****

3:30-4:00 **talk #29: Jens Knoop: Demand-Driven Type Analysis:
An Efficient Means for Just-In-Time
Compilation?**

4:00-4:30 **talk #30: Anthony Hosking: Program Optimizations
Enabled by Object Persistence**

Dinner

7:30 **INFORMAL Discussion**

Friday, November 10, 2000

- 9:00-9:30** **talk #31: Michael Franz: Alternatives to the Java Virtual Machine - Mobile Code Representations Aiding Code Generation**
- 9:30-10:00** **talk #32: Mark van den Brand: The New ASF-SDF Meta-Environment**
- 10:00-10:30** *****BREAK*****
- 10:30-11:00** **talk #33: Manish Gupta: A Framework for Deep Analysis of Java Programs**
- 11:00-11:30** **talk #34: Erik Ruf: Context-sensitive Unification-based Flow Analysis**