

VSTTE 2008
Verified Software:
Theories, Tools, Experiments
October 6 to 9
Toronto

All talks, tutorials, and panels take place in the Champagne Ballroom, Novotel, Toronto Centre.

All breakfasts, lunches and coffee breaks take place in the Alsace and Provence rooms of the hotel.

For dinners you are on your own (see pages 8 and 9), except for the Wednesday banquet, which takes place on a cruise boat leaving from Queen's Quay West, boarding at 6pm (see page7).

Monday October 6

8:00 breakfast

9:00 invited talk: Readable Formal Proofs
John Reynolds, Carnegie-Mellon University
chair: Jay Misra

10:00 coffee

10:30-12:30 session chair: Dave Naumann

10:30 Propositional Dynamic Logic for Recursive Procedures
Daniel Leivant

11:00 Mapped Separation Logic
Gerwin Klein, Rafal Kolanski

11:30 Unguessable Atoms: a Logical Foundation for Security
Mark Bickford

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(Monday October 6 continued)

12:00 Combining Domain-Specific and Foundational Logics
to Verify Complete Software Systems
Xinyu Feng, Zhong Shao, Yu Guo,
Yuan Dong

12:30 lunch

14:00-16:00 session chair: Jim Woodcock

14:00 invited tutorial: Practical Predicative Programming
Primer
Eric Hehner, University of Toronto

15:00 JML4: Towards an Industrial Grade IVE for Java and
Next Generation Research Platform for JML
Patrice Chalin, Perry R. James,
George Karabotsos

15:30 Incremental Benchmarks for Software Verification
Tools and Techniques
Bruce Weide, Murali Sitaraman,
Heather K. Harton, Bruce Adcock,
Paolo Bucci, Derek Bronish, Wayne D. Heym,
Jason Kirschenbaum, David Frazier

16:00 coffee

16:30-18:00 session chair Tiziana Margaria

16:30 Verified Protection Model of the seL4 Microkernel
Dhammika Elkaduwe, Gerwin Klein, Kevin
Elphinstone

(Monday October 6 continued)

17:00 Verification of the Deutsch-Schorr-Waite Marking Algorithm with Modal Logic
Yoshifumi Yuasa, Yoshinori Tanabe, Toshifusa Sekizawa, Koichi Takahashi.

17:30 Bounded Verification of Voting Software
Gregory Dennis, Kuat Yessenov,
Daniel Jackson

Tuesday October 7

8:00 breakfast

9:00 invited talk: from Verification to Synthesis
Moshe Vardi, Rice University
chair: Rick Hehner

10:00 coffee

10:30-12:30 session chair: Daniel Kröning

10:30 Expression Decomposition in a Rely/Guarantee Context
Joey Coleman

11:00 a Verification Approach for System-level Concurrent Programs
Matthias Daum, Jan Dörrenbächer, Mareike Schmidt,
Burkhart Wolff

11:30 Boogie Meets Regions: a Verification Experience Report
Anindya Banerjee, Michael Barnett, David Naumann

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(Tuesday October 7 continued)

12:00 Flexible Immutability with Frozen Objects
Rustan Leino, Peter Müller, Angela Wallenburg

12:30 lunch

14:00-16:00 session chair: Rajeev Joshi

14:00 invited tutorial: SMT@Microsoft
Leonardo de Moura, Microsoft

15:00 short presentations

16:00 coffee

16:30-18:00 session chair: Richard Paige

16:30 the Verisoft Approach to Systems Verification
Eyad Alkassar, Mark Hillebrand, Dirk Leinenbach,
Norbert W. Schirmer, Artem Starostin

17:00 Formal Functional Verification of Device Drivers
Eyad Alkassar, Mark Hillebrand

17:30 Verified Process-Context Switch for C Kernels
Artem Starostin, Alexandra Tsyban

Wednesday October 8

8:00 breakfast

9:00 invited talk: Combining Tests and Proofs
Sriram Rajamani, Microsoft
chair: Tony Hoare

10:00 coffee

(Wednesday October 8 continued)

- 10:30 invited tutorial: Verifying the Microsoft Hypervisor
Ernie Cohen, Microsoft
chair: Liu Zhiming
- 11:30 panel: Making Verification Mainstream
chair: Shankar
panelists: Rod Chapman, Tony Hoare, Rustan Leino,
Wolfgang Paul, Jonathan Shapiro
- 12:30 lunch
- 14:00 activities: see page 6
- 18:00 cruise and banquet: see page 7

Thursday October 9

- 8:00 breakfast
- 9:00 invited talk: Verification, Least-Fixpoint Checking,
Abstraction
Andreas Podelski, Universität Freiburg
chair: Wolfgang Paul
- 10:00 coffee
- 10:30 workshop: Theory in East Champagne
room, chair: David Naumann
workshop: Tools in West Champagne
room, chair Daniel Kröning
workshop: Experiments in Provence
room, chair: Rajeev Joshi
- 12:30 lunch

Wednesday afternoon activities

There is no arranged tour. You are in the heart of a large, dynamic city with plenty to do and see. Here are some suggestions.

Do you like museums? The Royal Ontario Museum www.rom.on.ca at Museum subway station is an architectural oddity, half classic and half crystal, with dinosaurs, natural history exhibits, and world cultural exhibits. A short walk (a couple of blocks) from there are two other odd museums: the Bata Shoe Museum www.batashoemuseum.ca at Bloor and St. George streets (St. George subway station), and the Gardiner Ceramic Museum www.gardinermuseum.on.ca just across from the ROM at 111 Queen's Park Road).

Another possibility is a walk around Harbourfront (where you have to be at 6pm anyway (see directions to cruise and dinner on page 7)). You could walk all the way to the CN Tower, which was the world's tallest structure from 1974 to 2007, and take a trip up the tower. Be sure to stand on the glass floor. To find the tower, just look up.

other things to do

The Toronto Islands have parks and gardens and beaches; you get the ferry at Yonge and Queen's Quay. To do this on Wednesday afternoon you would have to go promptly, and leave the islands before you are ready.

Ontario Place is at the bottom-left of the downtown map; it has activities for all ages; see www.ontarioplace.com/en. Like the islands, it might be too much for one afternoon.

The following suggestions for activities definitely take too much time for Wednesday afternoon; do them Friday or Saturday.

The Toronto Zoo is world famous; see www.torontozoo.com.

Black Creek Pioneer Village shows how life was in this part of the world three hundred years ago; see www.blackcreek.ca.

(other things to do continued)

The Ontario Science Centre has hands-on exhibits and activities for everyone; see www.ontariosciencecentre.ca.

Toronto has a symphony, an opera, and a great many other musical attractions. Spamalot is a “Broadway” style play, playing at the Canon Theatre, 244 Victoria St.; see www.canon-theatre.com.

how to get to the subway (métro, underground)

From the hotel, turn left along the Esplanade, turn right on Yonge St. to Front St., cross both Yonge and Front, go left and then right around the hockey hall of fame and into Brookfield Place, turn left down the long hall, go down a level, keep going in the same direction, then left and then right, and follow signs to “subway - Union Station”. There is a place where you face a choice between “subway” and “Royal Bank Plaza”; they both go to the subway, but the one marked “subway” just takes tokens, and the one marked “Royal Bank Plaza” has a human that sells tokens.

Wednesday evening cruise and dinner

We board the Northern Spirit between 18:00 and 18:30 at Queen's Quay West. It's a 15 minute walk from the hotel. Go left (west) along the Esplanade. Turn left (south) on Yonge, through the tunnel under the railway tracks, then under the expressway, past Lakeshore Blvd., cross Queen's Quay, turn right (west), past the Westin, past Bay St., cross York St., then a few more steps, and then turn left.

If you are coming from Union subway station, be sure to go up the stairs marked “Streetcars to Harbourfront”, and follow the signs to the streetcar, and take it one stop to Queen's Quay. Go up, out, cross Queen's Quay W, to the dock.

We disembark between 21:30 and 22:00.

restaurant guide*nearest the hotel:*

Bier Markt right across from the hotel

¿C'est What? at 67 Front St.E just E of Church

Bombay Palace at 71 Jarvis St. just N of King

Fionn MacCool's pub across from the hotel

Jamie Kennedy has tapas at 9 Church St. just N of the
Esplanade

Jersey Giant pub at 71 Front St.E just E of Church

the Keg steakhouse on Church St. just around the corner from
the hotel

le Papillon at 69 Front St.E just E of Church has Québec Cuisine

Hot House pasta NE corner of Church and Front

Shopsy's Deli on the NE corner of Yonge and Front

the old Spaghetti Factory just across from the hotel

Spring Rolls on Front St. just E of Church

Sultan's Tent on Front St. just W of Church

St.Lawrence Market E of Church between the Esplanade and
Front St.

a short walk from the hotel:

Brookfield Place (formerly BCE Place) on the NW corner of Yonge and Front has four nice restaurants: the Bottom Line, Ta Ke Sushi, Richtree, and Acoua. I particularly like Richtree.

The Distillery District is eastward along the Esplanade. It has the Boiler House at 55 Mill St., which serves cajun and creole food.

At Harbourfront (see the directions to the Wednesday dinner) there's Il Fornello, and the Boathouse Grill.

On the SW corner of Front and University/York Sts. there's Casey's, and just N of that on York St. there's Jack Astor's.

Pravda is a Russian restaurant and the Reservoir Lounge is a live jazz bar, both at 44 Wellington St.E just W of Church.

(restaurant guide continued)

a subway ride away from the hotel:

The Yorkville and Cumberland area just N of the University of Toronto, near the Bay subway station (Cumberland exit), has several nice restaurants; my favorite is the Courtyard at 121 Yorkville, which has Hungarian Cuisine.

Toronto has three China Towns; the oldest is on Dundas St.W from Bay to Spadina and on Spadina.

Baldwin St. just S of the University of Toronto, has a variety of restaurants, and it's where UofT people often have lunch.

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