# Programme

### Sunday

- Arrival to Porvoo. No organized programme.
- Informal gathering throughout afternoon and evening in Walter's pub (next to Hotel Seurahovi)
- Recommendations for dinner, from finer to more relaxed: <u>Wanha Laamanni</u> (closes at 8 pm on Sundays), <u>Timbaali</u> (11 pm?), <u>Rafael's Steakhouse</u> (9 pm), <u>Wanha Apoteekki</u> (10 pm)

### Monday

- 9:15: Registration and coffee
- 9:45: Hannu Toivonen, Tony Veale: Opening
- 10:00: Tony Veale: Introduction to Computational Creativity (double lecture)
- 12:00: Lunch break\*
- 13:30: Simon Colton: Building an Automated Painter (double lecture)
- 15:15: Coffee break
- 15:45-16:45: Amilcar Cardoso: Conceptual Blending in Computational Concept Creation (part 1/2)
- 18:00- : Bipin Indurkhya: A Hands-On Creativity Workshop over drinks\* and food (in Cafe Cabriole)

### Tuesday

- 9:00: Nada Lavrac: Text mining for Creative Cross-Domain Knowledge Discovery (double lecture)
- 10:45: Coffee break
- 11:15: Poster, demo, and art spotlights
- 12:00: Lunch break\*
- 13:30: Geraint Wiggins: Computational Creativity in Music and Music Cognition (part 1/3)
- 14:15: Coffee break
- 14:45-16:45: Rachel Giora: Optimal Innovation and Creative Interpretations of Literal and Non-Literal Language (double lecture)

### Wednesday

- 9:00: Graeme Ritchie: Evaluating Quality in Creative Systems (double lecture)
- 10:45: Coffee break
- 11:15: Amilcar Cardoso: Conceptual Blending in Computational Concept Creation (part 2/2)
- 12:00: Lunch break\*
- 13:30: Geraint Wiggins: Computational Creativity in Music and Music Cognition (part 2/3; double lecture)
- 15:15: Coffee break
- 15:45-16:45: Rob Saunders: Artificial Creative Systems: Multi-agent Simulations of Social Creativity (part 1/2)

#### Wednesday, continued

Computational Creativity Club (in Porvoon Paahtimo):

- 17:30: Doors open, drinks\* and food
- 19:00: Showtime with exhibitions, performances, and installations by school participants, house band

#### Thursday

- 9:00: Tony Veale: Creativity as a Web Service (double lecture)
- 10:45: Coffee break
- 11:15: Geraint Wiggins: Computational Creativity in Music and Music Cognition (part 3/3)
- 12:00: Lunch break\*
- 13:30: Rob Saunders: Artificial Creative Systems: Multi-agent Simulations of Social Creativity (part 2/2)
- 14:15: Coffee break
- 14:45: Rachel Giora: On the Creativity of Negation: The Case of Negative Sarcasm (double lecture)
- 16:45: Bus transfer to Taidetehdas
- 17:00- : Reception by the City of Porvoo (in *Taidetehdas*)

### Friday

- 9:00: Pablo Gervas: Computational Creativity in Literary Artifacts: Narrative and Poetry (double lecture)
- 10:45: Coffee break
- 11:15: Simon Colton: Philosophical and Formalisation Issues
- 12:00: Lunch break\*
- 13:30: Simon Colton: Guiding Principles of Building Creative Systems
- 14:30-15:00: Closing remarks

#### \* Lunches and drinks

Lunches are catered in Restaurants Seireeni and Amarillo (see map on the last page). Special dietary needs are catered in Seireeni, no quarantee about Amarillo.

Lunch tickets will be distributed to participants daily, according to the reservations made in the two restaurants. Pick *one ticket each day*.

Some drinks will be offered on the school on Mon (Cafe Cabriole) and Wed (Porvoon Paahtimo) evenings' social programme. You will receive two sets of drink tickets, one set for each event. The tickets are valid for basic drinks (standard beer, wine, cider, soft drinks), or you can use them as partial payment for more expensive drinks (like the local Malmgård beer). You can also buy additional drinks on your own cost. On Wed (Paahtimo, the Computational Creativity Club), the first drink will be free (no ticket required).

# Art, Demo and Poster Programme

Demos and posters are available during breaks on Tue-Thu. Demo sessions in the auditorium may be organized per need. Works or art are exhibited in the Computational Creativity Club on Wed evening.

Demos, posters, and artworks are introduced briefly in a spotlight session on Tuesday, at 11:15.

#### Art

Machine Libertine, a media poetry performance Taras Mashtalir, Natalia Fedorova

Phonetic Poetry, recitation of machine-discovered phonemic sonnets Stephen McGregor

Versificator.fm, musical collage generator Sebastien Piquemal

Artworks in Python, exhibition of generative art produced using Python Tom De Smedt

Brain Poetry, a mind reading installation that expresses brain waves as poetry Jukka Toivanen, K. Mäki-Reinikka, A. Alafuzoff, H. Kotkanen, J. Torniainen

ArNePo, exhibition of machine-inspired, hand-painted art combining news analysis, visual arts, and poetry Sandra Lääne, Oskar Gross, Jukka M. Toivanen, Hannu Toivonen

#### **Demos**

NodeBox Maak, Lucas Nijs

The next generation of NodeBox is coming soon. Sign up for the private beta.

Sonic Sculpture, Taras Mashtalir

A sonic sculpture is a multimedia artifact that consists of an urban sculpture, static or kinetic, accompanied by sound design in a multichannel configuration. An urban sculpture is an important part of the city architecture. As public art, it can reflect the city's cultural connotation and temperament. Its image can reflect the spirit and the character of the city.

### Demos, continued

Connotation Dictionary of Visual Symbols (CDVS), Ping Xiao

A dictionary where designers can find pictures to represent abstract concepts. It aims at the expressiveness and variety of visual expressions. CDVS searches in a large collection of annotated stock photos and groups retrieved photos by subjects.

Visual Representations of Abstract Concepts (VRAC), Ping Xiao

A textual version of CDVS, where designers are provided with concepts of objects and scenes in order to represent abstract concepts. VRAC discovers connotation knowledge in three general purpose semantic databases.

Metaphor Ideas for Pictorial Advertisements (MIPA), Ping Xiao

A program generating pictorial metaphor ideas for advertisements. It first searches for as diverse as possible concepts which are salient in the Unique Selling Proposition (USP) and have high Imageability. Then, the aptness of each found concept as metaphor vehicle is evaluated by four metrics, including salience, similarity with tenor, affect polarity and secondary attributes.

Creativity as Disruptive Adaptation – a Computational Case Study, Tapio Takala

Creative design is assumed to be a process that brings up new and useful products in a surprising way, i.e. against expectations but using a pattern instead of random search. These features are further analyzed with a case study of geometric packing problems. A computational problem solving agent is built that uses a small number of different strategies to place bottles in a case.

Modeling Creativity: Case Studies in Python, Tom De Smedt

I have a bachelors's degree in software engineering and a master's degree in audiovisual arts. In February 2013 I defended my PhD thesis on modeling creativity. The aim of my thesis was to provide a hands-on and interdisciplinary overview of generative art, computational creativity and computational linguistics. It discusses both the ups and downs in the search for machines that can create art.

Games by ANGELINA, Michael Cook

ANGELINA is a piece of software through which we are researching techniques for automating the process of game design. ANGELINA has made simple arcade games, news-inspired platforming games, generated game mechanics for Christmas-themed puzzlers, and is now designing full 3D experiences. Come and play some of the games and see how the system has developed over the last three years!

#### **Posters**

Metaphor Ideas for Pictorial Advertisements (MIPA), Ping Xiao

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Viewpoints AI, Mikhail Jacob

The Viewpoints AI system is an interactive art installation that seeks to improvise a contemporary movement-based / dance performance piece between a human interactor and a virtual agent. The system seeks to use freeform expressive gesture as its interaction modality by ignoring deep gestural semantics and relying on a systematic analysis of the aesthetics of movement taken from theater. The installation creates a liminal virtual-real interaction space between a shadow theatrical representation of the human's avatar and a projected virtual agent.

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A Phonemic Approach to Sonnet Discovery, Stephen McGregor

The system attempts to build and then traverse a refined search space for sonnets. The construction of this space is based on an analysis of a corpus of existing sonnets, looking at the phoneme as the elemental unit of poetic composition. The hope is that, if the sonnets are defined on the pertinent linguistic level (ie, the phoneme), then interesting new sonnets will be discoverable in close proximity to accepted existing sonnets.

Summarising Creation Processes in Blender, Vincent Akkermans, Mark B. Sandler, Geraint A. Wiggins

The billions of bytes of media that are created every day are easily distributed and consumed. However, these digital artefacts do not readily reveal how they came to be. Assuming that information about the creation process of a digital artefact can be useful or interesting, this work attempts to develop methods to automatically summarise these processes and endow digital media with processual provenance metadata.

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# Locations in Porvoo

- Lectures: Auditorium of the WSOY building (address: Mannerheiminkatu 20) (red point on the map)
- Catered lunches: <u>Seireeni</u>\* (Linnankoskenkatu 45) and <u>Amarillo</u> (Rauhankatu 29)
  - \*Special diets available in Seireeni
- Monday's hands-on session: <u>Cafe Cabriole</u> (Piispankatu 30) (<u>blue point</u>)
- Wednesday's Computational Creativity Club: <u>Porvoon Paahtimo</u> (Mannerheiminkatu 2, down by the river) (<u>yellow point</u>)
- Thursdays's reception: Taidetehdas Art Factory (Läntinen Aleksanterinkatu 1) (green point)
- Hotels: Seurahovi (Rauhankatu 27), Sparre (Piispankatu 34)

Phone number: in an emergency, call Hannu Toivonen at +358 50 9112405.

