

*The Helsinki Institute for Information Technology HIIT ([www.hiit.fi](http://www.hiit.fi)) is a joint research institute of the two leading research universities in Finland, the University of Helsinki (UH) and the Helsinki University of Technology (TKK). At present HIIT has some 170 researchers and staff. It operates in three locations: Spektri Business Park (Espoo next to TKK campus), Otaniemi (TKK campus) and Kumpula (UH campus).*

*HIIT conducts internationally high-level strategic research in information technology and related multi-disciplinary topics, especially in areas where Finnish IT industry has a significant role. It works in close co-operation with Finnish universities, research institutes, and industry, aiming at significant scientific impact that also benefits the industry and the progress of the Finnish information society. HIIT has a strong network of international partnerships with leading foreign research universities and institutions and with a national Centre-of-Excellence in Algorithmic Data Analysis Research (ALGODAN: [www.cs.helsinki.fi/research/algodan/](http://www.cs.helsinki.fi/research/algodan/)) of the Academy of Finland. At present, HIIT conducts research in four programmes: Algorithmic Data Analysis, Future Internet, Network Society, and Probabilistic Adaptive Systems.*

HIIT invites applications for

## **Postdoctoral and Senior Researcher positions**

The work starts on 1 May 2008 or thereafter. The contracts for the positions are for a maximum of three years but also shorter contracts are considered.

The salary for a post doctoral researcher is based on level 5 of the demands level chart for teaching and research personnel. With the salary component based on personal work performance the overall salary range is 2466-3600 euros per month.

The salary for a senior doctoral researcher is based on levels 6-7 of the demands level chart for teaching and research personnel. With the salary component based on personal work performance the overall salary range is 2930-4901 euros per month.

Applications are invited in the areas of all research programmes as detailed below:

### Data Analysis and Probabilistic Adaptive Systems

- data mining,
- algorithms,
- combinatorial pattern matching, with applications in biology and music retrieval,
- machine learning,
- probabilistic modeling, with applications in information access and data fusion,
- computational biology and bioinformatics,
- computational neuroscience,
- energy-aware computation, and
- ubiquitous computing.

### Future Internet

- architectural solutions for preventing unwanted traffic,

- new routing methods,
- mobility and multihoming,
- resource consumption and compensation mechanisms,
- privacy and attribution,
- trust and reputation architectures,
- information networking,
- network socio-economics,
- autonomy and resilience, and
- energy awareness.

#### Network Society

- mobile and ubiquitous applications,
- human-computer interaction and interface technologies,
- user-centered design,
- self-made media,
- future of moving image,
- social service design,
- peer production and distribution,
- social media culture,
- self-made privacy,
- print 2.0: future of print media,
- emotional customization,
- applied gaming,
- virtual economy, and
- experimental law.

Applications in other areas of computer science and related fields are also considered.

Young scientists from all over the world are invited to apply for the positions. All applicants are expected to command very good knowledge of English, strong technical and/or methodological skills, and strong interest in academic research. Postdoctoral applicants should have a PhD or equivalent in computer science or other relevant field and demonstrate a strong drive for further academic research after successfully completing their doctoral studies. Those whose PhD will be completed in the near future can also apply. Senior researcher applicants should have a PhD as above and experience on conducting high quality relevant research demonstrated in terms of journal publications and other forms of impact.

Applications should include the following items

- A Letter of Introduction in which the applicant describes briefly his/her main research activities so far, and presents a research plan for the position applied (max 5 pages). The desired length of the contract should also be proposed.
- Curriculum Vitae including a full list of publications
- Contact information of two persons willing to give references
- Copies of relevant university diplomas
- An official certificate of TOEFL (Test of English as a Foreign Language) in case the applicant does not speak Finnish, Swedish, or English as his/her first language.

Accepted applicants have the possibility to apply for internal funding for financing their own research group at HIIT.

INVITATION FOR  
APPLICATIONS  
05/12/2007

For more information, contact

Professor Martti Mäntylä (Martti.Mantyla@hiit.fi) or

Professor Esko Ukkonen (Esko.Ukkonen@cs.helsinki.fi).

For research on data mining and computational biology, contact

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For research on combinatorial pattern matching and for the ALGODAN unit, contact

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For research on computational neuroscience, contact

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For research on probabilistic adaptive systems, contact

Professor Petri Myllymäki (Petri.Myllymaki@cs.helsinki.fi).

For research on machine learning and bioinformatics, contact

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For research on future internet, contact

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For research on network society, contact

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Applications, addressed to one of the Research Directors of HIIT, should be sent to either to

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or to

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Applicants outside Finland can also send their applications by e-mail [info@hiit.fi](mailto:info@hiit.fi), with the subject "Postdoc positions" or "Senior Researcher positions".

Applications are not returned. **The application deadline is Tuesday, 15 January 2008 at 15.45.** The best applicants may be invited for interviews.