

TUNEDIT CHALLENGES

<u>TunedIT</u> (http://tunedit.org) is an international scientific platform for researchers and programmers in the fields of Data Mining, Computational Intelligence and Statistical Modeling. TunedIT runs periodically online contests – *Challenges* – that address selected real-world problems of data analysis. Competitions are open to the whole scientific community and attract participants from all over the world, from tens of different countries and hundreds of universities.

BRIDGING THE GAP BETWEEN **S**CIENCE AND **I**NDUSTRY

Today, development of IT solutions requires not only programming skills, but also exceptional mathematical, statistical and analytical knowledge – to be found solely in the academia. TunedIT, which originated as a scientific project of <u>experimentation</u> <u>platform</u> for data mining researchers, has strong ties with the scientific community and can serve as a bridge between industrial and scientific worlds.

If your company seeks dedicated intelligent algorithms, fine-tuned to your specific needs and employing the most advanced techniques of data mining and computational intelligence, TunedIT may help you "hire" hundreds of top data scientists at once, who will work together – in a form of online competition – to discover the best possible solution for your problem.

After the contest, you will receive legal rights to the winning algorithm.

BENEFITS:

- **Best Algorithm through** <u>Crowdsourcing</u>. Hundreds of professionals investigate your problem and try all different approaches to find the best solution. There is no other way to obtain a better solution.
- **Ready to Deploy.** You receive not only a written description of the algorithm, but also its source code, which can be integrated with production system right away.
- ROI boosting. How much would you have to pay if you wanted to hire a hundred specialists to investigate your problem?
 ... In TunedIT you'll pay 100 times less than that.
- **No hidden costs.** Avoid hidden costs of traditional employment: don't pay for the office space, insurance fees, taxes, holidays etc.
- **International Promotion of the Company.** Name and logo of your company will be included in all contest materials sent out to tens of different media: news services, journals, magazines, blogs, specialist forums and discussion groups, etc.
- **Quality Certificate.** The competition will be the best proof for your customers that you own market-leading technology, objectively evalutated by external scientific organization.
- **Become an Innovator.** The competition will build positive image of your company, as innovative and having strong links with the scientific community.

APPLICATION AREAS

TunedIT system is very flexible and supports all kinds of data types and data mining problems, like:

- Recommendations and collaborative filtering
- Customer Relationship Management (CRM)



- Text analysis and Natural Language Processing (NLP)
- Time series forecasting
- Computer vision, image and sound recognition
- Bioinformatics and genetics
- ... and many more.

OUR COMMUNITY

TunedIT members are mostly PhD Candidates, Graduates or Professors, from top universities in the world, some of which are listed below:

- Yale University
- Stanford University
- University of Cambridge
- University of Oxford
- University of Washington
- University of Toronto
- University of Sydney
- University of Tokyo
- University of Delhi
- Stockholm University
- Max Planck Inst. for Biological Cybernetics
- Heidelberg University

This diversity guarantees that the contest problem is approached from all different perspectives and the best possible solution is always tracked down by one of the teams.

DATA SECURITY

Data frequently contain sensitive information that can't be revealed to contest participants. If this is the case with your task, we can propose several solutions with different levels of complexity – they can be used together or each one separately:

- **Anonymization.** We'll review the dataset and perform all necessary preprocessing to remove personal identity information.
- **Perturbation.** We'll perform mathematical transformations of the data to remove sensitive information spread over a number of records or over the whole dataset.
- Secure Data Sandbox. In software engineering, the *sandbox* is a special place where new code can be safely tested without breaking outside environment. Tuned-IT extends this idea to the domain of data security. Our unique technology of Secure Data Sandbox (SDS) enables remote investigation of the data and *black-box* evaluation of the algorithms submitted by participants, without revealing the data-set itself. Sandbox is located either on our or your machines. In the latter case, even TunedIT itself does *not* have access to your data, which are kept secret on your computers.

LET DATA MINING SPECIALISTS PICK UP YOUR CHALLENGE

Check us on <u>www.tunedit.org</u>.