

Ants Project History

The Ants project began in 1999. If you are interested, you can find more details about the project's history here.

Started as a small project. We did not plan much, just to have a demo application for the next "Open Doors Day". So instead of one-year project we worked 9 years on it - with some breaks. And that's not the end; we are still going on...

P R O L O G

spring 1999

We are successfully finishing our studies at Fac. of Math. and Physics

Our diploma theses are:

Tomas: Modeling of Neural Networks with Several Mediators

Vasek: Modeling of Growing of Neural Networks

Vaclav: Modeling of Cells' Behavior According To Their Production

Oct 1999

Vasek and Vaclav are starting a civil service at Dept. of Neurology, 1st Medical Faculty, Charles University, Prague.

They hope of MDs' cooperation.

beginning of
Nov 1999

"The Open Doors Day" at Faculty Mathematics and Physics, Charles University, Prague - held in The National House at Vinohrady

We - as ex-students - are invited by Dept. of Applied Mathematics to show our diploma theses to public.

Our programs attracted several young people although they were not easy understandable, moreover they were lacking of a "fireworks-show" feature.

P H A S E I.

late Nov 1999

At our meeting in the library of the Dept. of Neurology the project Ants is established. After almost two months among doctors Vasek and Vaclav recognize that doctors are not able to cooperate. After the "Open Doors Day" we three are convinced that, if we had a better application showing results of our theories then more people would understand what we are doing and more people would maybe join us. We have chosen ants for our application - they are amazing small animals, everyone of us was observing them in childhood, ants are known almost around the whole world, one ant should be simulated easily - these were our arguments for our decision.

Dec 1999 The application is able to run. The model of ant is a high-level model.

Jan 2000 The application was improved a lot; unfortunately we have still only high-level models of ant. At the end of January we are working less and less - we are exhausted by technical (programming) parts of the project.

Apr 2000 Tomas is starting his army service.
For this time this is the end of our teamwork.
Now we have an environment where ants can run, each of us has his own high-level model of ant.

I N T E R M E Z Z O (civil/army service, then looking for jobs, girls and so on)
Apr 2001 That's the end of our civil/army services. We all are starting to work in the same company, even in the same room. But the work with ant has not started again - we are just copying ants to new computers and enjoying the speed of these new machines - of course we increased the number ants in the simulation (at 32 :)

P H A S E II.
Nov/Dec 2002 We are awaking our ants!! We are importing ants into CVS to be able to develop concurrently. We are working in the same company and that's a great advance and challenge for us.
In short time we fix several errors, which we could not find nearly 3 years ago. We are doing "all-night" simulations and are focusing on the model of the ant itself. We feel that neural model will come soon.
Tomas's models: Tara, Thaya
Vaclav's model: TestAnt
Vasek's model: BasicAnt

Jan 2003 Vaclav: BrontoAnt - the very first neural model is introduced. The basic element inside neural networks is called a "VAXBag"

Jul 2003 Tomas: Tara, Thaya - better neural model

I N T E R M E Z Z O 2 (Founded Spolecne s.r.o., focused on telco sector)
Nov 2003 Spolecne s.r.o. was founded.

P H A S E III.
Nov 2008 Vaclav + Tomas: project reopened. Meanwhile the DBN theory has been created. With the exact definition of DBN there was a need to create ants 100% compatible with the new DBN model.

Dec 2008 Tomas: a new neuron model Thrakia - an ant with only eleven neuron is able even to turn back - short term memory on neuron level introduced.

Feb 2009 Tomas: another cellular ant Theresia is built on top of Thrakia. Theresia keeps all of the Thrakia's features and adds the logic for seeking sugar as Thaya does.

Mar 2009 Thrakia source code becomes available on our website.