

# Very Large Data Bases

Berlin, September 9 - 12, 2003

29th International Conference on Very Large Databases was held in Berlin between September 9 and 12, 2003. This conference and ACM SIGMOD/PODS (Special Interest Group on Management of Data/Principles of Databases Systems) are the most important and the largest conferences concerning databases. It is organized every year by the VLDB Inc. Foundation (a non-profit organization from USA) in order to

“promote and exchange scientific work concerning databases at world level”. Since the conference is about science and technology, crucial for the geoinformation science, technologies and systems, it is clear why this conference and those similar to it should also be of special interest to geodesists.

Humboldt-Universität zu Berlin, Freie Universität Berlin, Universität Karlsruhe (TH) and Deutsche Gesellschaft für Informatik (German Informatics Society) were the organizers of this impressive conference.

The conference took place at the famous Humboldt University in Berlin (Humboldt-Universität zu Berlin), which has a long tradition and interesting history.

The University was established in 1810, and theoretician and statesman Wilhelm von Humboldt's founding concept named it “the mother of all modern universities”. The concept included the “*Universitas litterarum*”, which should both unite education and research and provide the students with general humanistic education. Later on, it was accepted throughout the world, and nearly all new universities are based on it. The concept was influenced by reformistic ideas of philosopher Johann Gottlieb Fichte, the first prorector of the University and theologian and philosopher Friedrich Schleiermacher, among others. At first, the university had four classical (for that time) faculties: Science of Law, Medicine, Philosophy and Theology. It is the first university to introduce many other disciplines, influenced by Wilhelm's brother, scientist Alexander von Humboldt. Chemist August von Hofmann, physicist Hermann von Helmholtz, mathematicians Ernst Kummer, Leopold Kronecker and Karl Theodor Weierstrass (“three stars of mathematics”), as well as Johannes Müller and Rudolf Virchow of medical sciences, also become famous outside Germany. The university provided as many as 29 Nobel Prize winners: Albert Einstein, Max Planck, Gustav Hertz, Robert Koch, Max Born, are only some of them. Many more people that would later become famous, studied there: Heinrich Heine, Adelbert von Chamisso, Ludwig Feuerbach, Otto von Bismarck, Karl Liebknecht, Franz Mehring, Alice Salomon, Karl Marx, etc.



The first building, which was, at the time, the palace of prince Henrich, was donated to the university by Prussian king Friedrich Wilhelm III. The building was constructed at the beautiful Unter den Linden boulevard (Under the Lime-trees). The University Library was established in 1831, when the royal library couldn't meet the

lecture needs any longer. The University also integrated other institutions that existed in Berlin during its development. One of them is Charité, famous even today.

594 participants from 44 countries (Western/Southern Europe: 300, Eastern Europe: 52, Asia/Australia: 67, Northern/Southern America: 175) participated at the conference. Although such division of Europe may be questioned, it is specified by the organizers as geographic. However, some countries (including Croatia) are traditionally ranked as Eastern European countries. Maybe a more precise division would be countries members of the European Union and those countries that are not. This division might not have been so important if the organizer had not done a significant change this year in order to ensure that lots of scientific institutions and individuals from countries of the former, political Eastern Europe would take part at such a respectable conference. The registration fees (530 €) was not obligatory for participants from Poland, Baltic countries, Byelorussia, Ukraine, Russia, Czech Republic, Slovakia, Hungary, Romania, Bulgaria and countries of the former Yugoslavia. Taking into consideration that there were 78 registered participants from Western Europe (not counting 158 from Germany), it is clear that the organizer succeed in getting the attention of scientists and professionals from that part of Europe. The author of this report was the only participant from Croatia, although he was registered as an employee of Austrian company *GISquadrat AG*.

The program of the conference was thematically divided into three complementary parts:

- Core Database Technology
- Infrastructure for Information Systems
- Industrial Applications and Experiences

The program also included three invited lectures, a presentation of the best paper in the last 10 years, 84 research-scientific papers presented in 25 sessions, 9 presentations in 3 industrial sessions, 3 panel sessions, 5 tutorials in 15 sessions, 17 demonstrations in 6 sessions, and 5 doctoral poster-presentations. The program

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U Berlinu je između 9. i 12. rujna 2003. održana 29. međunarodna konferencija o velikim bazama podataka (29th International Conference on Very Large Databases – VLDB2003). Ta konferencija, uz ACM SIGMOD/PODS (Special Interest Group on Management of Data/Principles of Databases Systems), jedna je od najznačajnijih i najvećih svjetskih konferencija iz oblasti baza podataka. Organizira se svake godine, a organizator je Zaklada VLDB Inc. (neprofitna organizacija iz SAD-a) s ciljem "promoviranja i razmjene znanstvenog rada u oblasti baza podataka na svjetskoj razini". S obzirom da se radi o znanosti i tehnologiji, ključnoj za geoinformacijsku znanost, tehnologije i sustave, jasno je zašto bi ta i slične konferencije, i za geodete trebala biti u fokusu, i od posebnog interesa.

Organizatori tog imponantnog skupa bili su: Humboldt-Universität zu Berlin, Freie Universität Berlin, Universität Karlsruhe (TH) i Deutsche Gesellschaft für Informatik (Njemačko informatičko društvo).

Konferencija je održana na poznatom berlinskom Humboldtovu Sveučilištu (Humboldt-Universität zu Berlin) koje ima dugu tradiciju i interesantnu povijest.

Sveučilište je utemeljeno 1810. godine, a utemeljiteljski koncept teoretičara i državnika Wilhelma von Humboldta dao mu je naziv "Majka svih modernih sveučilišta". Koncept je predvidio "Universitas litterarum" koji bi s jedne strane, trebao ujediniti izobrazbu i istraživanje, a s druge strane, osigurati studentima opću humanističku izobrazbu. On je prihvaćen kasnije u cijelom svijetu, i na njemu su utemeljena gotovo sva nova sveučilišta. Na taj su koncept utjecale, između ostalih, reformističke ideje filozofa Johanna Gottlieba Fichtea, prvog prorektora sveučilišta, odnosno teologa i filozofa Friedricha Schleiermachersa. Sveučilište je na početku, za to doba, imalo četiri klasična fakulteta: Pravo, Medicinu, Filozofiju i Teologiju. Pod utjecajem Wilhelmovog brata, znanstvenika Alexandra von Humboldta, to sveučilište prvo uvodi mnoge druge discipline. Kemičar August Wilhelm von Hofmann, fizičar Hermann von Helmholtz, matematičari Ernst Kummer, Leopold Kronecker, Karl Theodor Weierstrass ("zvjezdana trojka matematike"), kao i Johannes Müller i Rudolf Virchow u oblasti medicinskih znanosti, postaju poznati i izvan Njemačke. Sveučilište je dalo čak 29 nobelovaca: Albert Einstein, Max Planck, Gustav Hertz, Robert Koch, Max Born, samo su neki od njih. I mnogi drugi, kasnije poznati ljudi, studirali su ovdje: Heinrich Heine, Adelbert von Chamisso, Ludwig Feuerbach, Otto von Bismarck, Karl Liebknecht, Franz Mehring, Alice Salomon, Karl Marx, itd.

Prvu zgradu, koja je u to vrijeme bila palača princa Henricha, sveučilištu je poklonio pruski kralj Friedrich Wilhelm III.. Ta zgrada izgrađena je na prekrasnom berlinskom bulevaru Unter den Linden (Ispod lipa). Kada

kraljevska knjižnica više nije zadovoljavala nastavne potrebe, 1831. je utemeljena Sveučilišna knjižnica. Usporedno sa svojim razvojem, Sveučilište je integriralo i neke druge institucije koje su postojale u Berlinu. Jedna od njih je i Charité, koja je i danas poznata.

Na konferenciji VLDB2003 sudjelovalo je 594 osoba iz 44 zemlje svijeta (Zapadna/Južna Europa: 300, Istočna Europa: 52, Azija/Australija: 67, Sjeverna/Južna Amerika: 175). Iako takva podjela Europe može biti upitna, ona je od strane organizatora specificirana kao geografska. Međutim neke se zemlje (među kojima i Hrvatska), tradicionalno svrstavaju u zemlje Istočne Europe. Možda bi preciznija podjela bila na zemlje članice EU i one koje to nisu. Ta podjela i ne bi bila toliko značajna, da ove godine organizator nije učinio značajan iskorak, kako bi što više znanstvenih institucija i pojedinaca iz zemalja bivše, političke Istočne Europe, uzelo učešća na ovako respektabilnoj konferenciji. Naime, pristojba (530 €) za sudionike iz Poljske, Baltičkih država, Bjelorusije, Ukrajine, Rusije, Češke, Slovačke, Mađarske, Rumunjske, Bugarske, i zemalja bivše Jugoslavije nije bila obvezna. Ako se ima u vidu da je iz Zapadne Europe (ne računajući Njemačku sa 158), bilo 78 registriranih, može se reći da je organizator uspio privući pozornost znanstvenika i stručnjaka iz tog dijela Europe. Autor ovog izvješća, mada registriran kao djelatnik austrijske tvrtke GISquadrat AG, bio je jedini sudionik iz Hrvatske.

Program konferencije tematski je bio podijeljen u tri komplementarna dijela:

- Temeljna tehnologija baza podataka (Core Database Technology)
- Infrastruktura za informacijske sustave (Infrastructure for Information Systems)
- Industrijske aplikacije i iskustva (Industrial Applications and Experiences).

Program je sadržavao tri pozvana predavanja, prezentaciju najboljeg rada u posljednjih 10 godina, 84 istraživačko-znanstvena rada prezentiranih na 25 sjednica, 9 prezentacija u 3 industrijske sjednice, 3 panel sjednice, 5 tutorskih satova u 15 sjednica, 17 demonstracija u 6 sjednica, i 5 doktorskih poster-prezentacija. Programsko povjerenstvo je prihvatilo 84 (18%) od ukupno 457 prijavljenih radova, što dodatno i jasno govori o kriterijima i kvaliteti konferencije.

Zbornik radova (ISBN 0-12-722442-4) u izdanju Morgan Kaufmann Publishers, u tiskanom obliku sadrži 1151 stranicu, a njegovi urednici su :

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