Paul De Schacht

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Education

- MBA EDHEC, 2004, focus on IT & Knowledge Management
- MSc Computer Science with distinction, 1996, University Leuven, Belgium
- BSc Computer Science, 1994, University Leuven, Belgium

Experience

2007 - present, Research Engineer, Amadeus

Travel Intelligence (2012 - present)

- Maintain and improve model to estimate the total demand in air traffic
  - Perform data mining and analysis: identify, retrieve and clean data, build models and forecasts
  - Modeling based on quadratic programming, logistic regression (customer choice modeling), R forecasting, Hadoop, Python, Clojure, C++, shell scripts

Middleware and Security (2008 - 2011)

- Personnally implemented a rule engine, based on modified RETE algorithm (C++)
- Main developer and maintainer of a multithreaded C++ log server (20K logs/sec)
  - created a real time indexing and retrieval system for streaming log messages in a distributed log infrastructure (100+ servers)
  - analysed and improved the on-the-fly credit card number concealment
- Inventor of real time reconciliation of billing data in a distributed environment
  - patent pending

Central Reservation Hotel IT (2007 - 2008)

- Developed various topics for inventory & reservation system in Java/C++ SOA

Throughout

- 'Evangelist' of Big Data technologies: technical presentations for senior management, organizing workshops and writing internal white papers
- Follow up and prototype emerging IT technologies and understand impact on business

2004 - 2007, founder and CTO, TeleOS

TeleOS' goal is to bring health care experience to remote locations

- Responsible for vision and technical implementation
- Build web based medical record system linked with PBX to monitor patient's pain levels and automatically raise alerts to healthcare experts (LAMP, MySQL, C++, Asterisk)
- Implemented software for medical urgency laptop to upload data (cardio frequency, oxymeter, bloodpressure) to health care experts with video link (based on VLC). In collaboration with Alcatel Aliena Space for satellite infrastructure (Java)

2001 - 2003, Memsoft, Software Engineer

- Replaced proprietary database with relational database (C++, ODBC)
- Introduced continuous build and improved significantly the quality of the products

1997 - 2001, Barco, Research Engineer

Electronic Tooling Systems

- Analyzed and enhanced C++ rasterization software (vector data to streaming bitmap) for very high resolution (40000 ppi) laser printers
- Created library with 'set operations' on polygons to speed up rasterization by factor 100
- Co-developed client-server version of CAD/CAM using Iona Corba technologies (IDL, Java, C++)

Recent Training / Certificates

- Design Patterns
- Advanced C++
- Advanced C++ template programming
- Coursera Machine Learning

Languages

- Fluent Dutch, French and English

Personal Projects

- Contributor to https://github.com/opentraveldata (referential data)
- Personal ongoing side projects on https://github.com/pauldeschacht
  - extract height lines from topological maps to build 3D models; automatically extract tabular data from PDF files; small experiments with Cloudera's Impala engine

Skills

Programming languages

- C/C++, Java, Python, PHP, strong interest in Clojure

Databases

- SQL, MySQL, Oracle, SQLite
- BerkeleyDB, LevelDB, HBase, Impala, Neo4J

Network/Web techologies

- nginx, Apache, Clojure/Compojure, JSON/REST, Bootstrap, JS, HTML5, ZeroMQ

Methodologies

- OO, Design Pattern, UML, TDD, certified SCRUM master

Tools

- vi, Emacs, git, shell (grep, awk, sed, tr), gdb