

# DIDIER BURTON, PH.D. IN MATHEMATICS

USER EXPERIENCE & SOFTWARE ARCHITECT



Please contact me at:

**E-mail:** [didier@didierburton.com](mailto:didier@didierburton.com)

**Mobile:** +1 (508) 308-1240

See a more detailed résumé at:

**Web:** <http://didierburton.com>

## **Expertise:** *Bridging User Experience and Engineering through:*

- Rich User Experience Design & Development
- Rapid Prototyping using Flash, Flex 3, ActionScript, Java, XML
- Software Architecture & Distributed Technology
- Strong Object-Oriented Analysis / Design / Programming
- Component-Based Software Engineering / Management
- Network Optimization, Graph Theory
- Applied Mathematical Modeling

## Education

**97-00** Post-Doctorate, M.I.T., Cambridge, USA.

**88-92** Ph.D. in Mathematics, University of Namur, Belgium.

**82-86** M.S. in Mathematics, University of Namur, Belgium.  
Minor in Computer Science.

## Professional Experience

### User Experience Years (5 yrs)

**07-now** Director, User Experience Design, Yahoo! Inc., Marketing Products Design.

**06-07** Lead UI/Software Architect, Allurent, Inc.

**05-06** Sr. User Experience Architect, Bose Corporation, Automotive Systems Division.

**03-05** Sr. Software Architect, Bose Corporation, User Experience Research.

### Software Architecture Years (6 yrs)

**00-03** Chief Software Architect, Bose Corporation, Professional Systems Division.

**97-00** Project Manager & Research Associate, M.I.T., Intelligent Transportation Systems Program.

### Early Research & Development Years (11 yrs)

**93-97** Project Manager & Software Engineer, Samtech, Belgium.

**88-93** Research Assistant, University of Namur, Belgium.

**86-88** Researcher & Software Engineer, University of Namur, Belgium.

## Technical Computer Skills

**Languages:** Strong OO AS3/2 (5 yrs) & Java (8 yrs), JavaScript, XML (7 yrs), HTML (8 yrs), C++ (11 yrs).

**Methodologies:** OOA/OOD (15 years), Design Patterns (12 years), Unified Software Development Process (11 years), UML (8 years), Componentware (3 years).

**Frameworks & Graphical Standards:** Flex 3/2 (3 yrs), Flash/SVG (4 yrs), Swing for Java (6 years).

**Distributed Technologies:** TCP/IP, TCP Servers, Flash XML Sockets, Web Services, SOA, Java RMI.

**Software Tools Proficiency:** Adobe Fx, Fl, Ai, Ps, Id; Eclipse, Apache Ant, GNU tools.

## Philosophy

I strongly believe that user-centered designs must iteratively drive product developments, and that object-oriented thinking must drive the software efforts to bring the user experiences to life, while technologies are serving the graphic, interaction, and software design creativity.

N-tier architecture principles are essential to my research and development. They consist of several independent (horizontal) layers reflecting the domain-independent encapsulation of the various software components, going from the presentation layer at the top, down to the persistence layer. They localize the impact of switching technologies. Across layers, developments are partitioned into domain-related (vertical) subsystems. They maximize team work in parallel. The interaction or coupling across layers and sub-systems is carefully ruled in order to increase the reusability, interchangeability, modifiability, and scalability of selected components.

## Miscellaneous

### Languages:

- French: native tongue.
- English: fluent.
- Dutch: passive knowledge.
- Farsi: notions.

### Other Degrees:

**90-92** Auto Bodywork Graduat, I.E.P.S.C.F, Namur, Belgium.

Music Academy of Mont-sur-Marchienne, Belgium:

**79-82** Chamber Music Excellence Degree

**80-81** Piano Excellence Degree

**71-79** Piano Superior Degree

**69-75** Sol-fa Excellence Degree

### Hobbies:

Piano playing, movie scores, cooking, tennis, software technologies, photography, travels.