

## Sylvain Pagerit

### Educational Background

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| M.S. 2001 | Electrical and Computer Engineering, Digital Signal Processing and System and Control, Georgia Institute of Technology, Atlanta, GA |
| M.S. 2000 | Industrial Engineering, Automation and Industrial Computing, Ecole des Mines de Nantes, France                                      |

### Professional Experience

2003 – Present Engineering Specialist – Transportation System Analysis Engineer  
Argonne National Laboratory

Sylvain Pagerit works in the Vehicle Systems Section of Argonne National Lab's Center for Transportation Research. He works in the modeling and systems analysis group, developing PSAT (Powertrain System Analysis Toolkit), a "real world" forward-looking Hybrid Electrical Vehicle (HEV) simulation software. He is part of the team who designed the software data structure, along with some of the processing functions. His main achievements on this software comprehend the design of Graphical User Interface (GUI), both in Matlab and Visual C#, as well as the conception and structure of a dynamic database in XML which allow interlacing data and documentation. Part of his work in the GUI was incorporated by NREL into ADVISOR, an other simulation software developed by DOE. He also devised a generic global optimization algorithm to compute the best control strategy for most type of HEV. He received the 2004 R&D 100 award with Rousseau A. and Sharer P. for the PSAT Software.

2001 – 2003 Teaching Assistant  
Georgia Institute of Technology

Sylvain Pagerit worked as a lab instructor for the undergraduate electrical circuit classes. He supervised the student experiments, prepare their exams, as well as grade their work. He received an Outstanding Graduate Teaching Assistant award in 2001.

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| 2001 – 2003 | Full-time graduate student in Ph.D. program at Georgia Tech, Atlanta, GA  |
| 2000 - 2002 | Summer Intern – Worked on PSAT Development, Argonne National Laboratory   |
| 1999        | Summer Intern – Designed an hyper stable power supply for a new laser interferometer instrument, Laboratorio di Elettroottica, Universita di Pavia, Italy |

### Professional Societies (chosen to be consistent with job responsibilities)

Society of Automotive Engineers (SAE)

### Honors

R & D 100 award for PSAT, Rousseau A., Sharer P., Pagerit S., 2004  
Outstanding Graduate Teaching Assistant award, Georgia Institute of Technology, 2001

### **Community Service**

Volunteer to “Hands-on,” a program to help grade school teachers explain science in their class and design simple experiments the students can do by themselves.

Volunteer as council member for the Saint Joseph Hospital Association, Chaudron en Mauges, France

Volunteer to help manage the town library, Chaudron en Mauges, France.

### **Publications: Journal Articles**

Pagerit S., Rousseau A., Sharer P., “Global Optimization to Real Time Control of HEV Power Flow: Example of a Series Fuel Cell Hybrid Vehicle,” EVS Paper 292, 21<sup>st</sup> WorldWide Battery, Hybrid and Fuel Cell Electric Vehicle Symposium, Monaco, 2005

Sharer P., Rousseau A., Pagerit S., “Impact of FreedomCAR Goals on Well-to-Wheel Analysis”, SAE paper 2005-01-0004, SAE World Congress, Detroit, 2005

Rousseau A., Pagerit S., Monnet G., “The New Pngv System Analysis Toolkit Psat V4.1-- Evolution and Improvement,” SAE paper 2001-01-2536, Future Transportation Technology Conference, Costa Mesa, 2001

### **Selected Presentations/ Speeches**

Pagerit S., “Hierarchical Intelligent Controller for Hybrid Electrical Vehicle,” FutureTruck Competition, SAE World Congress, 2002