

## Europass curriculum vitae

## Academic Profile

### Personal information

Surname(s) / First name(s) **Charalambous Christoforos**

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Nationality(-ies) Cypriot

### Education

Dates Feb 1997 – Nov 1999

Title of qualification awarded **PhD in Systems Engineering**

Name of awarding institution Brunel University, London, UK

Key features Work focused on scheduling large scale manufacturing systems in the process industry using heuristic based algorithms and metaheuristic search

Dates Sep 1995 – Feb 1997

Title of qualification awarded **MPhil in Computation**

Name of awarding institution University of Manchester, Institute of Science and Technology (UMIST), Manchester, UK

Key features Scheduling of two stage manufacturing systems using Genetic Algorithms

Dates Sep 1992 – June 1995

Title of qualification awarded **BSc (1st Class Hons) in Computation**

Name of awarding institution University of Manchester, Institute of Science and Technology (UMIST), Manchester, UK

Key features Programme comprehensively covered the foundations of Computer Science and included subjects in the following areas: Programming and software development, System analysis, Databases, Computer Architecture, Networks, Compilers, Artificial Intelligence and Operations Research

### Work experience

Dates Sept 2007 – Present

Employer Name Frederick University Cyprus, Member of Frederick Research Centre

Occupation or position(s) held Associate Professor Computer Science and Engineering Dept.  
BSc Computer Science Supervisor

Main activities and responsibilities Overall responsibility for the running of the Computer Science Program of Study. Member of various university committees (Senate's Library and IT Committee, Quality Assurance Committee). Teaching focuses on areas of: Programming, Data Structures / Algorithms, Web Applications

Dates Sept 2001 – Sept 2007

Employer Name Frederick Institute of Technology, Member of Frederick Research Centre

Occupation or position(s) held 2005 – 2007: Ass. Professor Computer Science Dept. BSc/Diploma Computer Science Supervisor  
2003 – 2007: Head of Computing Services Department (HCSD)  
2001 – 2005: Lecturer, Computer Science Dept.

Main activities and responsibilities As course supervisor I was responsible for the overseeing the two programs of study including, responsibility for program improvement, upgrade of laboratory infrastructure, student registrations,

faculty recruitment and faculty load distribution. I also worked to increase departmental research activity with considerable success. My teaching focused in: Programming / Data Structures, Web enabled and distributed applications. I have also introduced and developed syllabi for 5 new subjects in the programs of study. In the role of Head of Computing Services Department I was responsible for the continual improvement of computer services offered by FIT and oversaw an annual budget of 100,000 CYP per year.

Dates Sept 1999 – Sept 2001  
Employer Name Brunel University, London, UK  
Occupation or position(s) held Research Associate, Systems Engineering Department  
Main activities and responsibilities I was principal investigator of a project funded by Unilever Research Laboratories which was involved with the improvement and deployment of technology developed during the PhD in different industrial settings

**Professional Organisations** Member – IEEE, Member – ACM, Member – Cyprus Computer Society

**Awards** Departmental Award – Awarded to the best graduate of the Department  
UMIST – Computation Department, 1995

Overseas Research Scheme Award for Postgraduate Study, 1995

**Research Projects**

Duration, Funding Ag. and Funding 2009– 2011 Research Promotion Foundation. Total Funding: euro 164,026  
Title Novel Technologies for Aggregate Planning Support in Flexible Supply Chains  
Role and Contribution Scientific Coordinator. Responsible for the overseeing of the scientific progress of the project and for delivering a considerable part of the research work including development of algorithms and mathematical models (MILP) for optimising aggregate planning, make/buy decisions and inventory management policies.

Duration, Funding Ag. and Funding 2006– 2008 Research Promotion Foundation. Total Funding: CYP 49,200  
Title Novel Technologies for the Optimisation of Resources Management in the Glass Cutting Industry  
Role and Contribution Scientific Coordinator. Responsible for the overseeing of the scientific progress of the project and for delivering a considerable part of the research work including development of algorithms for optimising glass cutting using technologies such as heuristics, mathematical programming and metaheuristic search.

Duration, Funding Ag. and Funding 2004 – 2007: Research Promotion Foundation. Total Funding: CYP 60,000  
Title Novel Technologies for Planning and Scheduling in the Process Industry of SMEs  
Role and Contribution Project and Scientific Coordinator. Responsible for the smooth running of the project, coordination of researchers and undertaking of a substantial part of the work which included the development of the scheduler heuristics and metaheuristic search solutions

Duration, Funding Ag. and Funding April 2005 – Oct 2005: UNOPS. Total Funding: USD 32,000  
Title Contaminant Content (Pb, Cd, As) in Cyprus Soils  
Role and Contribution FIT Project Coordinator. Responsible for the smooth running of the project including planning. Report and dissemination handling

Duration, Funding Ag. and Funding 2003 – 2004: UNOPS. Total Funding: USD 55,000  
Title Selenium Content in Cyprus Soils  
Role and Contribution FIT Project Coordinator. Responsible for the smooth running of the project including planning. Report and dissemination handling

Duration, Funding Ag. and Funding **March 2000 – Sept 2001:** Unilever Research Laboratories. Total Funding: GBP 80,400

Title Development of Scheduling Solutions for multi-stage intermitted systems in the process industry

Role and Contribution Scientific Coordinator and Principal Investigator of the project which included the development of metaheuristic tools for solving complex scheduling problems with various constraints and deploying solutions through the construction of an appropriate user interface.

## Publications

Doctoral Thesis Scheduling Multi-Stage Intermittent Manufacturing Systems in the Process Industry, Brunel University, 2000

Refereed Journal Publications

- **C Charalambous**, K Fleszar, “*Variable Neighbourhood decent for the unrelated parallel machine scheduling problem*”, International Journal of Artificial Intelligence Tools, (invited submission, Dec 2010)
- K Fleszar, **C Charalambous**, K Hindi, “*A variable neighbourhood descent heuristic for the problem of makespan minimisation on unrelated parallel machines with setup times*”, Journal of Intelligent Manufacturing (accepted, Feb 2011)
- **C Charalambous**, K Fleszar “*A constructive bin-oriented heuristic for the two-dimensional bin packing problem with guillotine cuts*”, Computers and Operations Research 38: 1443 - 1451, 2011
- K Fleszar, **C Charalambous**, “*Average-weight-controlled bin-oriented heuristics for the one-dimensional bin-packing problem*”, European Journal of Operational Research 210(2): 176-184, 2011.
- K. S. Hindi, K Fleszar and **C Charalambous**, “*An Effective Heuristic for the CLSP with Setup Times*”, Journal of the OR Society 54, 490-498, 2003
- **C Charalambous** and K Hindi, “*Modelling Multi-Stage Manufacturing Systems for Efficient Scheduling*”, European Journal of Operations Research, 122(2): 329-228, 2000

Refereed Conference Publications

- **C Charalambous**, S Pericous, K Fleszar, “*Aggregate Production Planning for low-demand, remote manufacturing systems*” Operations Research 2011 Conference, Zurich, Switzerland 2011
- K Fleszar, **C Charalambous**, “*Hybridizing local search with MIP for unrelated parallel machine scheduling problems with makespan minimization*”, 5<sup>th</sup> Multidisciplinary International Scheduling Conference, Phoenix Arizona, 2011
- **C Charalambous**, K Fleszar, K S Hindi, “*A hybrid searching method for the unrelated parallel machine scheduling problem*”, AIAI IFIP Advances in Information and Communication Technology, Vol 339, 230-237, 2010.
- Andreas Konstantinidis, **C Charalambous**, Aimin Zhou and Qingfu Zhang, “*Multi-objective Mobile Agent-based Sensor Network Routing using MOEA/D*”, IEEE World Congress on Computational Intelligence (CEC'10), 2010.
- **C Charalambous**, K Fleszar, K S Hindi, “*A constructive bin-oriented algorithm for the two-dimensional bin packing problem with guillotine cuts*” 23<sup>rd</sup> EURO Conference, Bonn, 2009
- K Fleszar, **C Charalambous**, K S Hindi, “*SAWMBS: A Sufficient-Average-Weight-Minimum-Bin-Slack Heuristic for One-Dimensional Bin-Packing*” 23<sup>rd</sup> EURO Conference, Bonn, 2009
- **C Charalambous**, k Fleszar, K S Hindi, “*An Effective VNS Algorithm for Solving the Unrelated Parallel Processor Scheduling Problem with Changeover Times*” XXII European Conference of Operational Research, Prague, 2007
- K Fleszar, **C Charalambous**, S Pericleous, “*Minimum-bin-waste Heuristic for the Two-dimensional Bin Packing Problem with Guillotine Cuts and Item Rotation*”, XXII European Conference of Operational Research, Prague, 2007
- **C Charalambous**, T Tahmassebi and K Hindi, “*Efficient Scheduling of Large Scale Manufacturing Systems in Consumer Goods and Process Industry*”, ESCAPE-10 Florence Italy 2000
- **C Charalambous** and K Hindi “*Modelling Multi-Stage Manufacturing Systems for Efficient*

Scheduling”, *Advanced in Modelling Paradigms, Methods and Applications*, Vienna, Austria, 1998

- **C Charalambous** and K Hindi, “*Scheduling of a two-stage, intermittent manufacturing system with finite intermediate storage using Genetic Algorithms and Simulated Annealing*” 2<sup>nd</sup> International Conference on Metaheuristics, Sophia-Antipolis, France, 1997
- **C. Charalambous** and K Hindi, “*Applying Genetic Algorithms to Complex Problems: The Case of Scheduling Multi-Stage Intermittent Manufacturing Systems*”, Proceedings of 2<sup>nd</sup> International GALESIA Conference IEE, Glasgow, UK, 471-471, 1997