Personal Data

Mobile phone (61) 04 3330 7896

LinkedIn http://au.linkedin.com/pub/olena-gavriliouk/18/6a3/b01

Email olena@mopi.com.au Website http://mopi.com.au

Specialization

Developing customized analytics tools to support more effective decision making.

Professional Expertise

- Data analyst/scientist
- Software developer
- Optimization specialist
- Business consultant
- Project manager

Skills

- Quantitative Optimization.
- MySQL, Oracle, SQLite.
- Machine Learning and Statistical Modelling.
- Data sourcing, interrogation, manipulation and transformation.
- Developing applications in: Python (5+years), C++, Java, Matlab.
- Beginner skills in: HTML, PHP, XML, C#, JavaScript, R.
- Geospatial technologies: ArcGIS, NetworkAnalyst.
- Advanced skills in many of Microsoft Office Suite programs.
- Expert knowledge of optimization technologies: Gurobi, CPLEX, AMPL.
- Operating systems: Linux, Windows, OS X.

Selected Consulting Projects

The following are some of the projects that I have managed and contributed to:

- *The Australian Bureau of Statistics*: I implemented the integration of multiple systems into a webservice solution used for managing the workforce of ABS interviewers.
- The Australian Bureau of Statistics: I led the stakeholder consultation, design and implementation of a software tool for optimal scheduling and routing of the ABS interviewers. The software models complex business rules, capacity and costs for interviewer work and has resulted in a significant gain of workforce and business planning efficiencies.
- *Dux Manufacturing* (GWA International Limited): Working closely with the client, I determined the optimal layout of a new plant, enabling significantly lower ongoing transportation and handling costs.
- *Boeing*: I led the development and implementation of a tool to support optimal inventory decision making in a Boeing manufacturing plant.
- Port Waratah Coal Services: I developed the simulation models used to assess throughput improvement strategies for the world's largest coal port.
- Hunter Valley Coal Chain Coordinator: I co-designed and implemented a tool to support tactical decisions about an optimal capacity expansion plan for the client's coal supply chain.

- Peter MacCallum Cancer Centre: I designed and implemented a software tool to find optimal radiation therapy procedures for treating brain tumors. The software reduces the duration of the expensive treatment, allowing an increase in the number of patients obtaining the treatment.
- *Platinum Ray*: I co-designed a system to optimize rental-vehicle routing and scheduling. The system resulted in significant ongoing operational savings.
- BlueScope Steel Limited: I provided optimization support and advice to senior management in the development of an optimal capacity expansion plan for one of the client's largest sites.

Career Experience

Business Operations Consultant

September 2011 - present

Sole Trader

Consultant

May 2007 - August 2011

CSIRO Mathematics, Informatics and Statistics

Consulting and managing projects in supply chain, logistics, production planning and scheduling, business process analysis and improvement, capacity expansion, and inventory management.

Education

Ph.D., Mathematics (Optimization)

December 2006

University of Kaiserslautern, Kaiserslautern, Germany

M.S., Applied Mathematics

December 2003

Clemson University, Clemson, SC USA

B.S., Mathematics

May 1999

North Georgia College and State University, Dahlonega, GA USA

Honors and Awards

Research Award 2010

CSIRO Mathematics, Informatics and Statistics

For conducting research resulting in a strong positive impact on industry.

Outstanding Masters Student Award

2003 - 2004

Mathematical Sciences Department, Clemson University, USA

Outstanding Mathematics Student

1998 - 1999

North Georgia College and State University, USA

References

Available upon request. Also see recommendations on http://au.linkedin.com/pub/olena-gavriliouk/18/6a3/b01 or http://mopi.com.au