Tristan Kleinschmidt

Senior Data Scientist

I am passionate about businesses making effective, informed decisions through the application of data science. My experience focuses on Industrial Goods applications which are faced with layers of complexity, specifically E2E supply chain and transportation networks. I have 10 years of using modelling, simulation and mathematical optimization to unpack this complexity and deliver value in capital decision making and operational improvement.

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| |  |  | | --- | --- | |  | **Work History** |  |  |  |  | | --- | --- | --- | | **2019-02 - Current** |  | Senior Data Scientist  BCG Gamma, Singapore   * Re-engineered industrial goods transportation ETA prediction model with gradient-boost regression model, improving regional performance by 5 to 15% * Developed commodity price discovery MIP optimization tool (including UI), producing over $90m value * Delivered Production Scheduling optimization tools for pulp and paper mills, and oil refineries, yielding up to 10% margin improvement * Delivered Optimization, Machine Learning and Simulation components of 2x Advanced Analytics training courses for manufacturing and shipping industry stakeholders |  |  |  |  | | --- | --- | --- | | **2012-01 - 2019-01** |  | Principal Consultant  The Simulation Group, Brisbane, Queensland   * Facilitation of Volume Risk Analysis for identifying range of throughput and financial outcomes for rail and port system capital projects; in one instance identifying a more value-accretive option worth $400m NPV. * Used discrete-event simulation to determine maintenance strategy requirements to ensure green-fields copper concentrator worth $2bn would achieve production targets. * Verified 5+ engineering designs for projects extending from underground conveying systems, copper concentrators, water supply systems, product bagging plants, and transportation networks. Some projects involved increasing production to levels far greater than anywhere in the world. |  |  |  |  | | --- | --- | --- | | **2010-01 - 2012-01** |  | Project Officer - Airports of the Future  Queensland University Of Technology, Brisbane, QLD   * Coordination of successful proposal to establish an Integrated Command and Control Facility for Large-Scale Critical Infrastructure Management, valued at ~$900k * Member of team awarded the 2011 Engineers Australia QLD Division Engineering Excellence Award for Research & Development * Publication of 3 peer-reviewed journal articles and 5 international conference papers in the areas of airport passenger simulation, passenger experience, flexible airport design and multi-disciplinary approaches to improving complex socio-technical systems. |  |  |  | | --- | --- | |  | **Education** |  |  |  |  | | --- | --- | --- | | **2006-01 - 2010-03** |  | Ph.D.: Electrical Engineering  Queensland University Of Technology - Brisbane, Australia |  |  |  |  | | --- | --- | --- | | **2005-02 - 2006-01** |  | Master of Engineering Science: Computer & Communications Engineering  Queensland University Of Technology - Brisbane, Australia |  |  |  |  | | --- | --- | --- | | **2002-02 - 2005-01** |  | Bachelor of Engineering: Electrical & Computer Engineering  Queensland University Of Technology - Brisbane, Australia |  |  |  | | --- | --- | |  | **Interests** |   Industrial Goods   |  |  | | --- | --- | |  | **Hobbies** |  * Running * Volunteering at parkrun * Travel * Photography |  | |  |  | | --- | --- | |  | **Contact** |   Address  Singapore, 199597  Phone  659 771 9781  E-mail  kleinschmidt\_tf@yahoo.com.au  LinkedIn  www.linkedin.com/in/tristan-kleinschmidt-97947515   |  |  | | --- | --- | |  | **Skills** |   Problem Solving    Communication    Team Management     |  |  | | --- | --- | |  | **Software** |   Python, R, Java    AnyLogic, ARENA    Tableau, Spotfire |