

Summary

Multi-skilled and versatile Lead Developer/CTO at Cybrik AI, a SaaS start-up, valued at USD 7 million, looking to disrupt how engineering and construction projects are managed through offering machine learning and cutting-edge AI solutions by automating data. A professional with strong commercial acumen and entrepreneurial skills, including budgeting and forecasting. Experience pitching to Venture Capitalists, clients and investors as well as designing end-to-end roadmaps for project launch. Represented the company at various accelerator programmes, including Techstars Indianapolis. Passionate about technology and transformation with an ability to learn new technologies. Experience mentoring team members and documenting best practices. Self-motivated activator, tenacious, resilient and reliable. Excellent organisation and time management skills.

Experience

Nov 2019

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Present

Lead Developer / CTO, Cybrik Inc (Startup)

- Demonstrated ownership, accountability and hands-on leadership by leading the technical strategic planning and vision implementation, including roadmap development and end-to-end management of sprints.
- Solely led the development and design of end-to-end, high quality software, complex technical prototypes and delivered the MVP for Cybrik AI, a cloud-based (Azure) enterprise platform with a React.js frontend, a Python backend and data ingestion using Apache Airflow. In creating the Cybrik AI solution, I employed machine learning and Natural Language Processing capabilities, including a data lake which allows the tracking of information and provides advanced search within archives through deployment of a deep learning model that extracts engineering data (including table extraction). Cybrik AI enables an efficient deliverable-generation, conflict resolution and overall user-friendly task management and project dashboards-creation for very large data sets and complex projects.
- The successful on-boarding of clients on Cybrik AI generated business opportunities, increasing the valuation of the company to USD 7 million, which in return enabled to scale-up and hire additional technical resources to advance capabilities.
- Based on all foregoing achievements, Cybrik AI was selected as a portfolio company of Techstars (the second largest pre-seed fund) where, alongside the CEO and COO, I represented and supported Cybrik throughout the process, demonstrating leadership, ownership, technical expertise and entrepreneurial skills, whilst strengthening pitching and business case presentation abilities, as well as overall investor relations and senior stakeholder management. [Click here for Cybrik AI at Techstars](#)
- Upon securing investment, led the recruitment process and development of a team of 3, which consisted of frontend developer, a backend developer and data scientist, defining requirements, deliverables, managing timelines and performance.
- Created Kubernetes infrastructure in Azure; Built pipelines in Github to support Continuous Integration and Continuous Delivery; Excellent knowledge and experience of various programming languages and techniques, such as: FAST API for creating RESTful APIs with OPeAPI specification and swagger documentation; Docker and Docker-compose; Javascript; Typescript; React; PostgreSQL, MongoDB; Elasticsearch; Azure; AWS; Kubernetes and Helm; Python libraries for machine learning such as scikit-learn and TensorFlow.

- Aug 2019
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Oct 2019
(contract)
- Data Scientist in Machine Learning, ONYX InSight and University of Strathclyde**
- Selected for a placement opportunity during the PhD at Strathclyde University to join ONYX Insights on a fixed-term project to apply data mining techniques and statistical analysis to extract data from wind turbines
 - Analysed complex datasets using Natural Language Processing techniques
 - Applied Machine Learning techniques, transforming raw data into valuable insights
 - Created a Graphical User Interface for data visualisation which will help the final user analyse the data, achieving a time saving of up to 90%
 - Strengthened proficiency in Python and ability to write standardised code
 - Offered a full-time position with Onyx upon completion of PHD which I refused due to my desire to join Cybrik AI to fully unlock my technical and commercial knowledge.
- Oct 2015
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Jul 2019
- PhD Researcher in Wind Energy Systems, University of Strathclyde, Glasgow**
- Identified new and innovative ways of extracting more data from wind turbines to maximise energy production
 - Concluded a research that proposes new ways of maximising energy production whilst reducing costs
 - Achieved and developed excellent project management and time management skills
 - Acquired excellent research and technical knowledge, as well as commercial awareness in the field of wind and renewable energy
- Feb 2019
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Mar 2021
(contract)
- Project Manager/ GHG Reporting Consultant, LivaNova Plc**
- Whilst undertaking my PhD, I consulted and thus project managed the Greenhouse Gas (GHG) reporting cycle for three consecutive years for LivaNova Plc, a Nasdaq-listed medical device manufacturing company, which had 9 production sites across various countries.
 - Reviewed and conducted a health-check of previous GHG reports, followed by a gap analysis and identification of opportunities for improvement
 - Demonstrated accountability and ownership given that reporting on GHG is a legal requirement under UK legislation and is included in the Annual Report, approved by the board of directors prior to circulation to shareholders. Liaised with external auditors and LivaNova's senior management to ensure timely delivery of an accurate and comprehensive report. Prepared a board presentation which highlighted opportunities for improvement and optimisation.
- Sep 2018
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Nov 2018
(contract)
- Research Assistant, ORE Catapult and University of Strathclyde, Glasgow**
- Placement opportunity during the PhD at Strathclyde University to join Ore Catapult where I developed an algorithm using MATLAB Simulink for the optimisation of a Battery Storage System, designed to maximise the Internal Rate of Return, used for capital budgeting and estimation of the profitability of potential investments
 - Achieved commercial awareness and strengthened my technical knowledge in algorithm development
 - Offered a full-time position as a Research Engineer with Ore Catapult upon finishing the placement, which I refused due to a desire to focus on completing my PhD.
- Apr 2018
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Jul 2018
(contract)
- Research Assistant, SSE Plc and University of Strathclyde, Glasgow**
- Selected for a placement opportunity during the PhD at Strathclyde University to join where I developed a MATLAB algorithm designed to characterise the Wind Turbine Power Curve in an innovative way using SCADA data, which can also be used for data cleaning, substantially reducing the time required and thus driving efficiency.
 - Consolidated my technical knowledge of algorithm development and strengthened my project management skills

- Oct 2015 **Teaching Assistant, University of Strathclyde, Glasgow**
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Jul 2019
- Offered the position of Teaching Assistant for the Graduate Programme in Wind, Solar and Hydro Energy
 - Assisted the Lecturers in the delivery of the foregoing course, including holding tutorials and preparing teaching materials
 - Mentored undergraduate students by enabling them to unlock their potential and succeed

Education

- Aug 2019 **PhD Researcher in Wind Energy Systems, University of Strathclyde, Glasgow**
"Improved Yield from Wind Turbines through online anomaly detection and compensation"
Awarded an annual GBP 14,000 grant for four consecutive years of the PhD
- Jul 2014 **Master's Degree in Electrical Engineering, University of Padua, Italy**
- Apr 2010 **Bachelor's Degree in Electrotechnical Engineering, University of Padua, Italy**