

Summary

As an experienced software engineer and data scientist, I have a proven track record of delivering high-quality software and leveraging machine learning techniques to uncover valuable insights from complex datasets. Through my academic and professional experiences, I have honed my research and technical skills, allowing me to tackle intricate problems and drive innovation. I am a highly motivated and detail-oriented professional with a passion for driving efficiency and pushing the boundaries of what is possible. My enthusiasm for technology and eagerness to learn new technologies enable me to stay ahead of emerging trends and continue growing as a professional.

Experience

Present

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Nov 2019

Lead Developer, Cybrik Inc

- Led technical strategic planning, including roadmap development and sprint management.
- 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 front end, a Python back end and data ingestion using Apache Airflow.
- Designed and implemented the document search functionalities using Machine Learning and Natural Language Processing (NLP) techniques reducing the time for our customers to find the relevant information.
- Scaled-up the company and hired additional technical resources to advance the platform after successful onboarding of clients onto Cybrik AI with the increase of the company valuation to US\$ 5 million.
- Represented Cybrik AI, with CEO and COO, during its selection as a portfolio company of Techstars, one of the largest pre-seed investors in the world;
- Led the recruitment and development of a team of 3 (a front-end developer, a back-end developer and a data scientist); defined requirements, deliverables, managed timelines and performance.
- Created Kubernetes infrastructure in Azure and built pipelines in Github to support Continuous Integration and Continuous Delivery; Excellent knowledge and experience of various programming languages and techniques, including: FAST API for creating RESTful APIs with OpenAPI specifications and swagger documentation; Docker and Docker-compose; Javascript and Typescript (React); PostgreSQL, MongoDB; Elasticsearch; Azure and AWS; Kubernetes and Helm; Python libraries for machine learning such as scikit-learn and TensorFlow.

Oct 2019

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Aug 2019

(contract)

Data Scientist, ONYX InSight and University of Strathclyde

- Selected 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 Graphical User Interface using Python and tkinter for data visualisation, creating a time savings for the final users of up to 90%.
- Strengthened proficiency in Python and ability to write standardised code.

- Jul 2019 – Oct 2015 **PhD Researcher in Wind Energy Systems, University of Strathclyde, Glasgow**
- Identified new and innovative ways of extracting data from wind turbines to maximise energy production.
 - Developed research proposing new ways of maximising energy production whilst reducing costs.
 - Advanced project management and time management skills.
 - Furthered research and technical knowledge as well as commercial awareness in the field of wind and renewable energy.
- Mar 2021 – Feb 2019 (contract) **Project Manager/ GHG Reporting Consultant, LivaNova Plc**
- Consulted and project-managed the Greenhouse Gas (GHG) reporting cycle for three consecutive years for LivaNova Plc, a Nasdaq-listed medical device manufacturing company, with 9 production sites across various countries.
 - Identified opportunities for improvement in GHG reporting following a gap analysis, review and health-check of previous reports.
 - Prepared and presented findings to the LivaNova Board of Directors highlighting opportunities for improvement and optimization.
 - Worked with external auditors and senior management to ensure timely delivery of an accurate and comprehensive GHG report to the LivaNova Board of Directors for the approval prior to submission to the UK Regulator and disclosure in the Annual Report to shareholders.
- Nov 2018 – Sep 2018 (contract) **Research Assistant, ORE Catapult and University of Strathclyde, Glasgow**
- Developed algorithm using MATLAB Simulink used for capital budgeting and estimation of the profitability of potential investments that optimises a Battery Storage System and maximises the Internal Rate of Return for the UK Energy Market
 - Developed commercial awareness and strengthened technical knowledge of algorithm development.
 - Offered a full-time position as a Research Engineer.
- Jul 2018 – Apr 2018 (contract) **Research Assistant, SSE Plc and University of Strathclyde, Glasgow**
- Designed MATLAB algorithm to characterise the Wind Turbine Power Curves in an innovative way using SCADA data, substantially reducing the time required for data cleaning and achieving improved efficiency.
 - Consolidated technical knowledge of algorithm development and strengthened project management skills
- Jul 2019 – Oct 2015 **Teaching Assistant, University of Strathclyde, Glasgow**
- Served as Teaching Assistant for the Graduate Programme in Wind, Solar and Hydro Energy.
 - Assisted Lecturers in the delivery of the course; held tutorials and prepared teaching materials.
 - Mentored undergraduate students.

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 £14,000 grant for four consecutive years of PhD studies.
- Jul 2014 **Master's Degree in Electrical Engineering, University of Padua, Italy**
- Apr 2010 **Bachelor's Degree in Electrotechnical Engineering, University of Padua, Italy**