Dany Majard | Principal Applied Scientist

French Citizen - London, UK

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Holistic yet thorough. Excels in research, stakeholder management <u>and</u> engineering. Provides leadership, initiative and adaptability.

Experience

Principal Applied Scientist

Sept 2021 - Present day

Streetbees (Market Research), Python/PyTorch/Tensorflow/NetworkX

London, UK

- o Managed and mentored a client facing team of 2 Data Scientists while identifying the major risks, liabilities and opportunities within client delivery when scaling the business.
- o Lead a major shift in culture from project-centric to product-centric, establishing the code base and fostering repeatability and continuous development. The team now routinely uses GitHub, Jira and IDEs.
- Heavily refactored the code base and produced documentation to reduce delivery time by 4 and allow quick scaling of the client delivery capabilities.
- o Refined a single market topic modeling and clustering POC for a major beverage corporation. Designed and implemented a production level pipeline to function over 22 markets, counting.
- o Performed the same refining and productionization for a competitive market analysis POC using user surveys, cementing a 3-year contract with a major food corporation.

Data Scientist - Lead Data Scientist

Oct 2018 - Aug 2021

Outra (Proptech), Python/SQL/Snowflake/Spark

London, UK

- o Managed a team of 3 Data Scientists + Engineer
- o Built a 1-class Classifier of customers for geolocalized FB marketing, reducing the client's CPL from £40 to £13.
- o Improved the performance of 28 gradient boosted models on property data, increasing its KPIs on 29M properties by >15%, outranking all competitors and unlocking a £200k contract with a major insurance company.
- o Combined Machine Learning (LGBM) and statistical methods (Survival Analysis) to estimate propensity to move of UK households, resulting in £90k MRR in data sales within 6 months at virtually no marginal costs, thanks to an automated ETL, modeling and delivery pipeline.
- o Used a Contextual Multi-Arm Bandit approach for Offer Mechanic automation for a restaurant chain which, combined with a restaurant segmentation, yielded a £100k annual contract.

Data Scientist Aug 2018

Close Brothers (Consulting / Banking), Python/R/Alteryx

London, UK

- o Provided data science expertise as a service for an insurance broker the bank provides premium financing to.
- o Delivered predictive models for 60 days cancellation reducing overhead costs for background checks by up to 30%
- o Delivered predictive models for propensity to take financing allowing first year ROI to be positive.

Professional Development

July 2017-July 2018

Reims, France

Director of sales & customer relations

2014-2016

Festka s.r.o. (cycling/luxury)

Prague, Czechia

- $\circ\,$ Increased sales by 400% by establishing a global distribution network of 24 partners.
- o Created a sales analytics and models tools with scripts on google sheets.
- o Partnered with Pipefy.com on deployment of their kanban platform to our manufacturing processes.
- o Excelled in customer care, with a satisfaction rate superior to 98%.

Post-doctorate Fellow 2012-2014

Masaryk University Brno, Czechia

- o Continued work on own research program on higher cubical category theory and higher cubical groups.
- o Developed and taught a course on graphical calculus and monoidal categories.
- o Gave talks in many prestigious universities, including Cambridge and Oxford.

Education

Pivigo London, UK

S2DS Fellowship

Aug 2018

Mini-MBA boosted, highly selective 5 week program supporting PhD holders in their transition to Data Science.

Dept. of Mathematics, Kansas State University

Manhattan, KS, USA

PhD, Mathematics

June 2012

Thesis Cubical categories, TQFTs and possible new representations for the Poincare group

Supervisor Louis Crane

Award Hostinsky Outstanding GTA in Academics

Abstract This thesis contains a reformulation of Topological Quantum Field Theories of cobordisms with corners as higher cubical categories. It also investigates cubical categories as a gate to better formulating the coherence conditions for n-categories. Moreover it gives examples of double groups that are of significant importance for theoretical physics.

CPT, Universite Aix-Marseille II

Luminy, France

MSc, Theoretical, Mathematical and Particle Physics

June 2006

Thesis 2nd Quantization of Colored Particles: Quest for the appropriate structure

Supervisor William Joyce, University of Canterbury, Christchurch, NZ

Abstract We address the need for expansion of the parastatistics of quarks to $Rep(SU_3)$ accommodating its Z_3 grading, leading to creation/anihilation "algebras" stemming from premonoidal categories. The emerging structure is a generalization of Lie algebras to weakly-associative tensor products that we named Rainbow algebras.

IUT de Reims Reims, France

DUT Mesures Physiques

June 2001

Specialization Materials and physico-chemical controls

Internship AFICA - Metal Refinery. Developed protocols for the Atomic Absorption Spectrophotometer of the incoming material chemistry lab, then ran the lab for 3 month before mentoring a technician for replacement.

Projects

Ethics // Law

Colege des Bernardins

L'impact de l'autonomie technologique sur l'etat de droit

Jan 2019-May 2020

Participatins as an AI expert in a working group on the impact of autonomous systems on the State of Law. The group will produce a report for the Ministry of Justice by the end of 2020

Blockchain // Network Analysis

Google

Cryptocurrencies , graph database, google BigQuery, SQL

June 2018-Oct 2018

Joint work with Allen Day, science Advocate @Google. Analysis of the Bitcoin and Ethereum ledger to improve transparency and raise quantitative knowledge on the cryptocurrencies landscape and smart contracts dynamics.

Other

Personal Journey Asia/Pacific

Travels

Jan-July 2017

o Rode a 2500+ km unassisted solo cycling trip and competed in the AHBPC 2017.

- o Visited the Tibetan government to explore opportunities teaching modern sciences to buddhist Monks and Nuns.
- o Visited Djalu Gurruwiwi, elder of the Galpu clan in Arnhem Land, Australia, guardian of 60000+ years of wisdom.

EHBA - European Hardcourt Bikepolo Association

Europe 2014-2016

Founding Board Member, Head

o Developed the foundations of the organization around 6 poles of development, each with a 2 year mission statement.

- o Established and maintained communication with the North American and Pacific organizations.
- o Leader in the establishment of rulesets and referees in the sport.

Languages

FrenchEnglishJapaneseCzechGermanNativeFluentBeginnerBeginnerBeginner

Interests

Sport: Played Hardcourt Bikepolo at an international level with Prague's based "Golem". Acroyoga practitioner **Board Games**: Great way to sharpen analytic and social skills. Regular volunteer for Stronghold publishing. Hosting events at the workplace