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Data Talent Programme

KARL STORZ and PROFUSION have partnered to offer a
data science internships with the opportunity of a full-
time employment

Application deadline 3 May 2023

Karl Storz and Profusion are partnering to offer you an internship

" **Hello!** "

Profusion - transform the way organisations work with data. We design, build and embed data & AI products and ways of working that create value. We modernise and restructure our clients' data pipelines, build value-generating algorithms, and create dashboards that generate insights.

KARL STORZ – the leading endoscope manufacturer – offers systems for human and veterinary medicine as well as for industrial applications. Endoscopes, instruments, devices, and camera systems from KARL STORZ have stood for tradition, advanced technology, and quality for more than 75 years.

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Data Talent Programme **Overview**

The Data Talent Programme connects top organisations with Masters' students, supporting interns on their transition from academia to successful data careers. The student will write their Masters' dissertation on the chosen project.

We partner with Universities to bring emerging Data Science and Data Engineering talent to our clients through a 6-week internship, where interns work on a real-world data project that links to their Masters' dissertation.

Once offered a placement on the programme, our interns are put through a two-week bootcamp where they are trained to be client-ready by our team of Data Science and Engineering experts.

The **detail**

The Logistics

Our Data Talent Programme runs annually, from **June to August**

Interns kick-off their programme with a two-week **bootcamp**, followed by a six-week **data project**. The bootcamp will be remote and the project will be in Tuttlingen, Germany.

Profusion is based in London and therefore, interns are paid the London Living Wage.

Interns will receive **mentorship** from Profusion Data Science and Engineering teams, who will also offer light support on their dissertation.

Interns will be able to work on their Profusion project and dissertation simultaneously.

The Bootcamp

Before our interns begin their placement, Profusion put them through an intensive **business bootcamp** which includes:

✳ Data Science Consulting and Project Management

✳ SQL and Advanced SQL databases

✳ Reinforcement Learning

✳ Statistical Traps

✳ Data Ethics

✳ Data Visualisation

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Data Talent Programme Job Description

We are looking for talented MSc students, who would be interested in doing their dissertation at Karl Storz in Tuttlingen and in cooperation with a data science consultancy in London, United Kingdom. The MSc student will be employed and supervised by Profusion in London whilst working on a project for Karl Storz. After the 8-week internship Karl Storz offers the opportunity to apply for a full-time role.

This opportunity offers the chance to carry out work that is technical, inspired by the most up to date thinking whilst delivering results in a fast-paced environment. You'll be required to communicate regularly with non-technical business stakeholders to ensure that the work being done is aligned with the ever- changing commercial needs and goals of the company.

After an initial professional bootcamp, you will start your project with Karl Storz. In addition to your university academic supervisor, you will have a business mentor and a data science mentor at Profusion to whom you will report every week on your progress and who will provide support to guarantee that you are on track to deliver quality data science work aligned with the expectations of the relevant business stakeholders.

Key responsibilities

* Learn and follow the data science consultancy model to articulate and deliver a high-quality project.

* Spend time at Karl Storz's offices (dependent on restrictions and client working patterns) to meet with relevant business stakeholders.

* Create an effective project plan aligned with the business stakeholders' needs.

* Weekly communication with Profusion's business and technical mentors.

* Deliver a high-impact commercial presentation and report with the key project findings.

* Develop clean and well-commented code.

* Deliver an insightful MSc dissertation.

Essential skills

- Current MSc students in Data Science, Maths, Statistics, AI or similar.
- Exposure to programming languages such as R, Python, Matlab, etc.
- Interest in solving business problems using data science, statistical and machine learning techniques.
- Excellent written and verbal communication skills with an ability to present key findings.
- A proactive approach and the ability to be self-managing and innovative.
- A genuine interest in how data can transform businesses & the ability to translate data-driven insights into actions and decisions.

Optional skills

- Exposure to SQL language and ETL processes in structured databases.
- Data visualisation skills in BI tools such Sisense, Tableau, Amazon QuickSight, or Qlik.
- Project management and organisational skills, with the ability to prioritise and meet deadlines in a calm and effective way.
- Eye for detail and critical thinking to interpret and understand client needs and transform them into mathematical and data science problems.

The **project**

* KARL STORZ is looking to create a range of algorithms to improve sales insights and efficiency in data operations processes.

* Possible use cases/algorithms are RFM, churn, lifetime value, propensity to buy, shopping cart analysis.

* Use the latest academic research in machine learning and AI to automatically optimize processes on the interface between sales and operations.

* Use AI to combine historical data with external trends and market predictions to help forecast sales and pricing with a high degree of accuracy.

Next **steps**:

Step 1:

Submit your CV and cover letter via the application link, as well as answering some of our screening questions by **3 May 2023**

Step 2:

If successful, you will be asked to complete a technical test that will evaluate your programming skills

Step 3:

If you pass the technical test, you will then move on to your final interview with our Data Science team.

Previous intern success stories

An intern working with a luxury car manufacturer to build a recommendation system for their in-house app

Challenge:

A luxury car manufacturer had a very personal relationship with their customers up to the point of delivery, but then often lost touch. They wanted to improve future sales to existing customers by staying front-of-mind.

Insight:

The company's ownership app had limited data. We realised that by increasing its daily utility in people's lives we could keep the company's brand closer to their existing customers.

Solution:

Our intern built an all-new content recommendation system for the owners app. It promoted specifically the news, articles and events that would be interesting to each specific owner to give them more reasons to use the app and stay engaged.

Impact:

By monitoring dwell time on each piece of content, the content for each user was optimised for their preferences, increasing customer engagement with the app as well as reducing content curation time.

Previous intern success stories

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An intern worked with a currency exchange business on a
project to improve performance marketing

Challenge:

Our client, a currency exchange provider, was struggling to
harness data to gain commercial value from it due to a lack of
resource. The company wanted to find a way to group
customers and target them with bespoke marketing strategies.

Insight:

Being relatively early in the data journey, the company had
basic insight and structure to their data. We worked to clean
the data and established which questions we could answer
with data. This also kickstarted their data science journey.

Solution:

Our intern did a deep dive analysis into each customer segment
to identify similarities and trends and to group them. This
enabled the client to understand the different customer groups
better and target them in a more personalised way.

Impact:

The intern identified 6 discrete customer types and was
able to map the customer journey, to target them more
effectively. The client was then able to use this to engage
customers more effectively, by identifying marketing goals
for each customer segment and establishing key questions
that needed answering to progress customers through
segments.

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We think our programme is **pretty great**, but don't just take our word for it...

> "
>
> The Data Academy with Profusion was instrumental for my learning and career growth. I got to solve real business challenges and work with senior data scientists. I am very proud of the work I delivered, and so was the client.
>
> **Data Academy Alumni, 2020**

> "
>
> Nothing short of an amazing experience, full of thorough training on state-of-the-art tools, dedicated guidance from supervisors and hands-on experience of working on a data science project.
>
> **Data Academy Alumni, 2021**

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