Company February 13, 2018

Dear Sir or Madam,

I am a Manchester based Data Scientist with a history in Front-End Development, Digital Marketing and Digital Art. I am now aspiring to further my skills as a Data Scientist. I hope to one day lead a team with my expertise.

My work as a Digital Artist and Front-End Developer bubbles up in my manipulation of Data Science work with a craving for visualization.

I am a strong believer in AGILE methodologies, while appreciating that other methods have their place, and have used SCRUM and Kanban professionally. I hold a firm belief that User Experience and Data Science are the key to the future of success in the technology sector and am always keen to bring these aspects into my development when appropriate. I am confident in running Retrospectives, Stand-ups and reflective meetings as I believe these are vital for improving team happiness and love opportunities to apply these to any team that will let me. I have also assisted in the Open project which encourages people to talk more openly about their emotions in the workplace.

I have organized events of many scale from monthly Digital Art and Data Science meet-ups to much larger scale University events with over 500 attendees. I am always eager to take part in events such as MancJS and MancML and bring any learnings back into the business where possible. I have given a handful of talks such as:

- o CSS as a digital art form
- o How to Fake it until you make it, a Digital Marketing Case Study
- o AHP, a customer-first search

I see Data Science problems like crosswords in the back of a newspaper, I enjoy the fun puzzles they bring in my day-to-day life and occasionally participate in Kaggle competitions to assess my skills. I look forward to further utilizing my skills in R and python and am keen to improve my DevOps skills.

Thank you very much for your time and I am thankful for the opportunity of being considered for this position.

Hope to hear from you soon.

Sincerely yours,

# Joseph Allen

Attached: curriculum vitæ

# Joseph Allen

# Curriculum Vitae

# Education

2013-2017 Bachelor of Computer Science and Mathematics with Industrial Experience, The University of Manchester, BA (Hons) 2:1.

# Experience

2017-Current **Data Scientist**, *LateRooms.com*, Manchester.

Working on the Data Science Team has given me an opportunity to add an Agile process in an environment that welcomes it.

- o Hotel Rank Algorithm, a system which generates the rankings of hotels. I implemented multiprocessing to reduce the generation time and created a dashboard in Google Data Studio to monitor parity.
- o Analytic Hierarchy Process based customer-first search for the new business platform. And gave a corresponding brown bag.
- o implemented a feature store which lets the Analytics team create higher-level features, and backfills up to two years. Using Docker and cron jobs this stays up to date.
- o Occasional short term investigations such as "Does the sentiment of Hotel Descriptions correlate with Hotel Success?" and "How have our hotels changed over time?".
- o Creation of a basic Chatbot using the Watson API to deal with FAQs.

### 2015–2017 **Foundation UI Developer**, *LateRooms.com*, Manchester.

Front-End Developer mainly focusing on the daily additions to the website using HTML, CSS, JS along with some larger deliverables such as:

- o Co-brands generator. This allows the creation of a new co-brand from a handful of inputs.
- o Geo-shapes dashboard, worked closely with the Data Science team to create a React dashboard.
- o New platform, currently working on creating a new platform to run many brand off of simultaneously using React with styled components.

#### Skills

Programming Python, NumPy, Pandas, PyTest, R, HTML, CSS, JavaScript, Git, GitHub, LATEX, Java

# Projects

#### 2017 Clustering New York Taxi Journeys.

Aided in a research project to utilize Principal Component Analysis and it's categorical counterpart to cluster New York taxi journeys into a plain English description https://github.com/joezcool02/taxi-project

#### 2017 Hate Speech Classification.

A Model which classifies the subtle differences between rude and offensive(homophobic/racist/sexist etc.) tweets. This was mainly a dive into NLP and feature generation with some investigation into Facebooks FastText project.

#### 2017 Change Detection in Live Video.

Created an application to allow Digital Artists to experiment with various forms of change detection and set the layers to their choice of color, image, video, coded example or live camera. This involved user testing and the application of UX principles. https://youtu.be/S8BN\_aUCGc0

## 2012 Extended Essay, "To what extent is there a mathematical equation for beauty?".

I worked independently researching the Golden Ratio and its occurrences in nature and decided to see by performing a survey on over a hundred individuals, I utilized data analysis skills to then extrapolate information from the data and wrote a 5000 word report on the topic and presented my findings