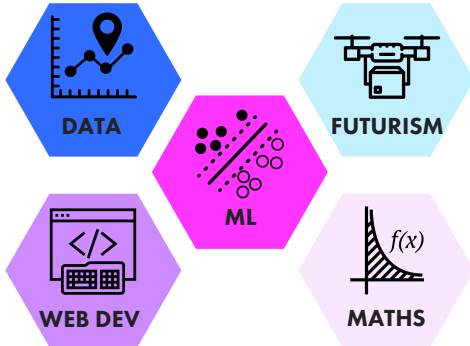# CURRICULUM VITAE OF BECKS SIMPSON

Hello, my name is Becks, I am a recent Electronic and Informations Engineering Graduate with one year of experience in FullStack Development & Research. I'm seeking opportunities to improve my capabilities in the fields of Machine Learning and Data Analysis.

I'm passionate about futurism, researching emerging technologies and exploring data & machine learning. I'm looking for a learning orientated professional environment where I can make a real impact and tackle challenging problems.

CONTACT

becks.simpson@outlook.com
rs6713.github.io/portfolio/
github.com/rs6713

INTERESTS

- DATA
- FUTURISM
- ML
- WEB DEV
- MATHS $f(x)$

GROWTH

I'm a frequent attender of hackathons, tech talks and am always looking for opportunities to improve my existing skill sets.

INDEPENDENT LEARNING
- Google Machine Learning Crash Course
- HackerRank Challenges: SQL 58/58, Problem Solving 100+/563

I am also a Co-Organiser of the annual Nonbinary In Tech Conference, that highlights the amazing work of nonbinary people in tech.

PROJECTS

BUILD A NEURAL NETWORK
Web App developed using deeplearning.js (tensorflow.js precursor), inspired by tinyurl.com/y9ln646s. Users can learn about the history of neural networks, then train their own image classifier using webcam footage.

PONG GENETIC ALGORITHM
Tkinter Pong Demo that learned how to move the paddle according to the balls movements using a basic evolutionary algorithm.

EMOTICON OVERLAY
Real time OpenCV Python App that called the Azure facial emotion recognition API to overlay emoticons on detected faces. Footage and API calls were handled using threading.

DISABILITY HACKATHON
Used NLP (Sentiment Analysis, KeyWord Extraction) to score an insurance document's disability friendliness.

EXPERIENCE

2018-19 Junior Software Engineer
SohoStrategy - 5 Months
Developed a Dataset CMS with React Frontend & Node.js Backend connected to a PostgreSQL Database. This was setup on AWS: RDS, EC2 with CodeDeploy. Collected metadata via Scrapy.

2017-18 Prototype Developer
NBC International - 1 Year
Researched new, emerging technologies impacting the media industry & completed several FullStack App Projects. Developed Demos to raise awareness of the different fields of AI, ML and the Developer tools available.
TakeAway: Learned about the role of AI & ML as the next big industry innovators

2013-17 EIE MEng 2:1
Imperial College London - 4 Years
Electronics and Information Integrated Masters, with a final year focus on Machine Learning.
Courses: ML, HCI, Pattern Recognition, High Performance Computing, Networks & Security, Graphics and Robotics
Final Year Project: (Deep) Learning the association between pedestrian images and their Natural Language Descriptions. Word2Vec Sentence Embeddings, and image features were compressed using Auto Encoders. These were then fused and input to a correlation CNN that would output their pairwise similarity [0 ➜ 1].
TakeAway: How to automate parameter tuning, experiment with different neural structures and the importance of feature engineering and Dataset augmentation.

2016 Future Academy Resident
AKQA, UK - 3 Months
Participated in a series of Startup-like Agile Sprints, involving Ideation, User Testing, Visual Prototyping and Pitching.
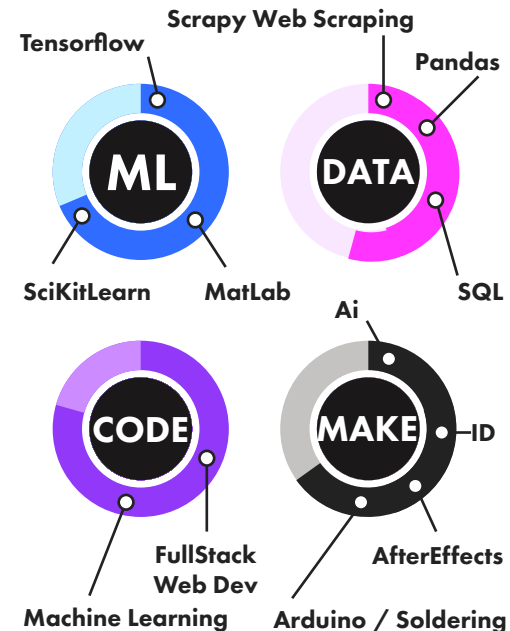**TakeAway:** How to develop a compelling narrative and visuals to communicate a problem/solution to clients.
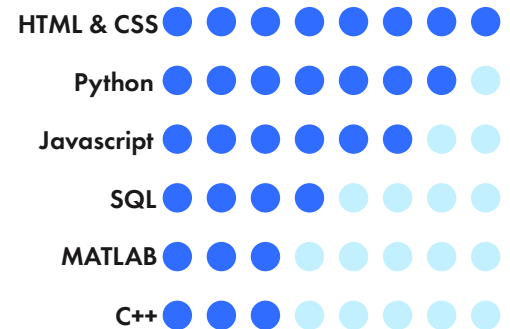
2005-13 Secondary School
Dame Alice Owens, UK
Further Maths=Physics=Chemistry=A*

SKILLS

ML — Tensorflow, Scrapy Web Scraping, SciKitLearn, MatLab

DATA — Pandas, SQL

CODE — Machine Learning, FullStack Web Dev

MAKE — Ai, ID, AfterEffects, Arduino / Soldering

LANGUAGES

- HTML & CSS: ●●●●●●●●
- Python: ●●●●●●●○
- Javascript: ●●●●●●○○
- SQL: ●●●●●○○○
- MATLAB: ●●●●○○○○
- C++: ●●●○○○○○

FWS/LIBRARIES

DATA
Pandas   NumPy   Scrapy   MongoDB

MACHINE LEARNING
SciKit-Learn   NLTK   Tensorflow   MicrosoftAzure   MATLAB-NeuralKit

DEVOPS
AWS (CodeDeploy, EC2, RDS)   CircleCI

FRONTEND
React   Angular   SCSS   JQuery

BACKEND
NodeJS

EXPERIENCE ➜