



Jim W. Barrett, PhD

Data Scientist

 Lorem ipsum dolor sit amet, consectetur adipiscing elit.

 +00 11 2233 44

 example@example.com

 github.com/jimbarrett27

 linkedin.com/in/jimbarrett27

 <https://www.jimbarrett.phd>

Summary

I am a data scientist and developer with 6 years of professional experience and a PhD in astrophysics. I am a highly skilled Python programmer, as well as having had experience in several other languages (C++, JavaScript, SQL). I am a strong problem solver, with a passion for breaking down complex problems into simpler ones, as well as an advocate for good software practices in data science. I love to collaborate with and learn from my colleagues, as well as mentoring and developing the skills of more junior colleagues. I am also a passionate communicator, and always jump at any opportunity to present my work to all kinds of audiences.

Experience

Uppsala Monitoring Centre / Senior Data Scientist

MARCH 2020 - PRESENT, UPPSALA

I am a senior data scientist in the research department at UMC. We collaborate with the WHO to analyse reports of suspected side effects to medicines. I have worked on a diversity of projects relating to the processing, analysis and visualisation of this data.

Most recently, I have been working on the detection of duplicate reports. We have developed a model using Python with numpy, scipy and scikit-learn to detect when two reports are talking about the same patient. Since we have a large, TSQL database of 40M reports, we must balance model performance with complexity.

Another passion project of mine at work has been the development of prototype apps for use by the medical doctors and pharmaceutical professionals I work with to recognise plausible causal links between medications and adverse events. I am a strong believer that the quickest way to improve our methods is to see how they perform in the real world. I have been responsible for the deployment of these apps to an on premises linux server using Docker swarm, and am playing a key role in migrating them to the cloud.

I am also an enthusiastic communicator, having contributed to academic articles, popular science articles and podcasts. I have delivered multiple talks per year, both to specialist and generalist audiences, about several different topics. I have successfully supervised 3 thesis students in pursuit of their masters.

Klarna / Software Engineer

MAY 2018 - MARCH 2020, STOCKHOLM

I was working in a research and development team, developing new, machine learning driven tools to enhance users' online shopping experience. This involved developing models to interpret web data, from text, to images, to HTML, in order to interact with and interpret web pages on the users' behalf. These solutions were built with both JavaScript and Python.

Education

University of Birmingham / PhD Astrophysics

AUGUST 2014 - JUNE 2018, BIRMINGHAM, UK

I worked in the gravitational waves group, where we developed software in C++ to simulate the evolution of pairs of stars. My specific project was building a machine learning emulator model in Python with which we could conduct Bayesian inference studies to relate experimental data to our simulations.

I also helped teach a number of courses in C++, from introductory to masters level.

University of Birmingham / MSci Physics

SEPTEMBER 2009 - JULY 2013, BIRMINGHAM, UK

I achieved an average grade of ~75% (1st Class with Honours), specialising in theoretical and mathematical physics.

Other Interests and Skills

I spend my free time socialising with friends, running, playing chess, playing video games, reading and listening to podcasts. I also listen to a great deal of music.

I also have a handful of hobby coding projects that I tinker with from time to time.

I am a native English speaker, and can speak Swedish conversationally.