Michael Wright

https://www.linkedin.com/in/drmwright

EDUCATION

UNIVERSITY OF GLASGOW
PhD in High Energy Physics
Grad. 2014 | Glasgow, Scotland

UNIVERSITY OF GLASGOW
BSc Hons in Mathematics & Physics
Grad. 2009 | Glasgow, Scotland

MEARNS CASTLE
Grad. 2004 | Glasgow, Scotland

LINKS

Github:// wrightm
Twitter:// @wright1michael1
LinkedIn:// drmwright

SKILLS

PROGRAMMING

Day to day:
Java • Python • SQL • MySQL

In the past:
C++ • Javascript • CSS • HTML
Oracle • Sybase • Shell

Other:
LaTeX

AWARDS

2009 STFC Studentship

EXPERIENCE

FANDUEL | Platform Engineering - Replatforming API - Senior Software Engineer
January 2016 - Present | Glasgow, Scotland

- Designing, implementing and reviewing the replatforming of the FanDuel API into a Java GraphQL reactive event driven API.
- The tech stack includes Java, Guava, Guice, Vert.x, RXJava, GraphQL, Spock and internal libraries.

FANDUEL | Platform Engineering - Replatforming Core Services - Senior Software Engineer
December 2016 - Present | Glasgow, Scotland

- Designing, implementing and overseeing migration of new gRPC and Protocol Buffers stack within core services.
- Designing, implementing and maintaining internal gRPC server toolset.
- Designing, implementing and reviewing migration of canonical integration data model written in Protocol Buffers. These models are used throughout our backend services and API. They are the canonical model for all exposed RPC endpoints at FanDuel.

FANDUEL | Platform Engineering - Replatforming Message Queue - Software Engineer
September 2016 - Present | Glasgow, Scotland

- Designing, implementing, documenting and leading the Java core services migration to AWS SNS and SQS from RabbitMQ.
- Implemented and continue to maintain core libraries that provision AWS Topics, SQS queues and AWS Policies, which are used throughout java core services.
- Maintain backlog of ongoing and future development within the toolset.
- Oversee and review migrations throughout other services.

FANDUEL | Platform Engineering - Activity, News and Subscription Service - Software Engineer
March 2016 - Present | Glasgow, Scotland

- Designing, implementing, stress testing, maintaining and providing production support for the service.
- The Activity service is an Event driven service that takes in external events from other FanDuel services, stores (event store), transforms and emits new events downstream.
- The News service listens to certain events from the Activity service and transforms these events into a number of news items.
- The Subscription service listens to certain events from the Activity service and subscribes or unsubscribes users to a particular channel.
- The core tech stack is Java, Guava, Guice, Hibernate, AWS Aurora, RabbitMQ, AWS SNS, AWS SQS and our own JSON-RPC event driven server.
- Additionally for stress testing and integration tests we use Python, Locust and PyTest and other internal libraries.

EXPERIENCE

FANDUEL | Core Engineering - User Attributes Service - Software Engineer

December 2015 - March 2016 | Glasgow, Scotland

- Designed, implemented, stress tested and continue to maintain and support.
- The service is an idempotent Key Value store built upon AWS Aurora relational database.
- The service provides multiple JSON RPC endpoints that allow clients to create, update and delete attributes of various types (idempotently if needed).
- The core tech stack is Java, Guava, Guice, Hibernate, AWS Aurora and our own JSON-RPC event driven server.
- Additionally for stress testing and integration tests we use Python, Locust and PyTest and other internal libraries.

FANDUEL | Core Engineering - Core Services - Software Engineer

October 2015 - Present | Glasgow, Scotland

- Maintaining and supporting backend Java core services when needed.
- Provide production support during on call shifts. This requires having an in depth understanding of our backend core services.

JP MORGAN | Core Components and Architecture - Service Registry - Software Engineer

Sep 2014 - October 2015 | Glasgow, Scotland

- Designed, implemented, maintained service.
- The web application was a metadata store for Asset Management services. The service was used to gather and present metadata for all services across JPM Asset Management (2000+ applications).
- I was part of the full software life cycle from designing and implementing the data model into Oracle and building out the Jersey RESTful web services and AngularJS web application.
- My duties on the project also included mentoring junior members in the team on best practises.
- The tech stack included Java, Spring, MyBatis, Jersey, Jackson, JUnit, Mockito, Tomcat, JS, HTML, CSS, Bootstrap, Grunt, Yeoman, AngularJS, Karma, Protractor, Oracle, Power Designer, Grunt, Maven and Jenkins.

JP MORGAN | Core Components and Architecture - Party And Accounts - Software Engineer

Feb 2015 - October 2015 | Glasgow, Scotland

- Migration of a legacy VB6 client to an AngularJS web application, fed by a RESTful backend service.
- The implementation of the new application consisted of transferring business logic from the old client into a Jersey RESTful web service and AngularJS web application.
- I was a full-stack developer and designed, wrote, reviewed and deployed code using Java, Spring, MyBatis, Jersey, Jackson, JUnit, Mockito, Tomcat, JS, HTML, CSS, Bootstrap, Grunt, Yeoman, AngularJS, Karma, Protractor, Sybase, Grunt, Maven and Jenkins.

JP MORGAN | Nobel - Data Visualisation - Software Engineer

Sep 2014 - March 2015 | Glasgow, Scotland

- Led the front end development of the Nobel Laureate and Nomination Visualisation.
- The web application was a number of data visualisations that presented Laureate data over a number of dimensions that could be dynamically filtered.
- My duties in the project also included presenting weekly updates to stake holders and gathering requirements.
- The tech stack included - JS, HTML, CSS, Bootstrap, Require, D3, Dc and Crossfilters.

EXPERIENCE

CERN | Grid Computing - Software Engineer

June 2010 – Dec 2012 | Geneva, Switzerland

- Backend software engineer apart of the automation of the ATLAS computing operations.
- The system calculated real-time aggregated monitoring metrics that were used to monitor and control ATLAS Grid computing sites around the world.
- Designed, wrote and deployed large parts of the algorithms that controlled analysis servers across the globe. The algorithms were backed by a circuit breaker service that used these algorithms to register and deregister servers.
- The software design was published in the Journal of Physics.
- The tech stack that I used was Python, PyCurl, NumPy and Python multiprocessing libraries.

CERN | Software Engineer

May 2010 – Aug 2012 | Geneva, Switzerland

- Worked on the Large Hadron Collider (LHC) writing a bespoke software framework to analyse data coming from the ATLAS detector.
- The event driven application was designed to run on the LHC Grid Computing infrastructure to analyse petabytes of LHC data.
- The application was used to analyse data for the Higgs Boson analysis.
- I designed, wrote and deployed code using C++, Python, Shell Scripting and Grid Computing.

RESEARCH

UNIVERSITY OF GLASGOW | PhD Physicist

September 2009 – 2014 | Glasgow, Scotland

- Worked with multiple institutes across the globe on world leading research searching for the Standard Model Higgs Boson.
- Implemented and ran the first combined statistical analysis result for the combined Higgs Boson search.
- Implemented and designed an event driven generic analysis framework for the University of Glasgow.

PUBLICATIONS

[1] W. M. et al. Automating atlas computing operations using the site status board. ***Journal of Physics: Conference Series 396 032072***, 2012.

[2] W. M. et al. Search for the standard model higgs boson produced in association with a vector boson and decaying to a b-quark pair with the atlas detector. ***Phys. Lett. B 718 369-390.***, 2012.

[3] W. M. et al. Particle identification efficiencies for the atlfast correctors tool. ***ATL-COM-SOFT-2010-017***, Geneva : CERN, 2010.

[4] W. M. et al. Search for a charged higgs boson h+ decaying via to tau(lep)+nu in ttbar events with one or two light leptons in the final state using 1.03/fb of pp collision data recorded at sqrt(s) = 7 tev with the atlas detector. ***ATLAS-CONF-2011-151***, Geneva : CERN, 2011.

[5] W. M. et al. Combined search for the standard model higgs boson with the atlas detector at the lhc using 4.6-4.9 fb-1 of pp collision data at $\sqrt{s}$ = 7 tev collected in 2011. ***ATL-COM-PHYS-2012-451***, Geneva : CERN, 2012.