
EMPLOYMENT HISTORY

- **Football Radar** 2018 - Present
Team Lead and Manager
 - **People management:** Lead for the Football Modelling team. Management responsibilities for software developers, data scientists and system administrators.
 - **Project management:** Use of lightweight kanban with daily standups. Consistently encouraging the team to focus on the most beneficial and impactful work. Proponent of delivering minimal viable products and subsequently iterating. Use of reviews and retrospectives to drive continuous improvement.
 - **Product delivery:** Close collaboration with product managers and members of the business from inception to delivery of both new and upgraded predictive football models. Coordinated bespoke solutions for recent high value football tournaments (Champions League, Europa League, 2018 World Cup).
 - **System architecture:** Encouraging simple solutions, consistent technology choices and established design patterns where possible. Pragmatic decision making about when and how to pay down technical debt. Recent work focussed on identifying which components in a legacy monolith should be decommissioned or retained.
 - **Recruitment:** Reviewed and improved engineering hiring processes. Hire/No hire final decision making.
 - **Cost controls:** Realisation of significant annual AWS cost savings (£100k+) through process improvements, architectural changes, reserved instances and right-sizing.
- **Football Radar** 2016 - 2018
Software Engineer
 - **Scala development:** Delivery of company strategic next generation model, predominately written in functional Scala using Akka and Finagle. Designed and built a number of backend services, scheduled jobs, debug pages and integrations with trading systems.
 - **GPU programming:** Enabled in-play football simulations by proposing and leading project to rewrite core monte-carlo simulator in C++/CUDA. Completion of the GPU accelerated simulator enabled new trading opportunities due to lower latencies.
 - **Verification and testing:** Improved speed, usability and affordability of AWS based model backtesting infrastructure through simplification, increased parallelism and performance profiling. Outcomes included a reduction in the runtime of certain model verification jobs from 2 weeks to under 24 hours.
 - **Production stability:** Introduced Prometheus monitoring and alerting to improve visibility of system faults and performance bottlenecks. Identified and resolved long standing stability issues that incurred significant opportunity cost to trading efforts during busy periods.
- **UBS** 2015 - 2016
Authorised Officer
 - **Technical leadership:** Management of a team of offshore software engineers.
 - **Automation:** Introduced CI/CD tooling (Jenkins/GitHub) to improve software release process.
- **UBS** 2013 - 2014
Non Officer
 - **Java development:** Backend programming for a variety of custom and third party applications.
 - **Linux engineering:** Platform engineering and system administration.
- **UBS** 2011 - 2013
Graduate Programme

EDUCATION

- **University of Bristol** 2008 - 2011
2:1 Computer Science BSc (with Hons)

TECHNOLOGIES

- **Languages:** Scala, C++, SQL, Python **Tools:** AWS, Linux, Kafka, Terraform, Docker