

My computing and programming experience comes from two main sources so far: my Integrated Master's Degree from Imperial College and my career progression through the ranks at Blue Copal. At Imperial College London, I completed a 4-year degree, taking on a variety of modules and a multitude of challenges, not least the interruption by a global pandemic. During my degree, I was required to complete a 5.5-month industrial placement, where I initially joined Blue Copal as an intern developer. After completing my placement, I was invited to be the only intern to return as a full-time developer, with the offer to not complete my degree and start full-time straight away. However, I was determined to complete my degree and we agreed I would start one month after I handed in my final project.

During my internship, I started a project called Market Managers (later updated to wattFlow), which would be able to run multiple trading "strategies" in EPEX auctions. This project was aimed at allowing our traders to scale the number of trades they could make, significantly reduce human error, and recycle volume automatically across auctions. I designed the system's architecture, created the new "strategy" concept, and started the full-stack work for the system, all of which remain in place until now. My specifications were quite loose and involved consistent communication with the trading team to ensure any ideas I had worked with their vision of the tool. The only decision that was not in my hands was using Elixir with the Phoenix web framework, however, this was part of the reason I had joined Blue Copal as I had just been introduced to Elixir in a distributed algorithms module and I was interested in using it for more industrial purposes. Blue Copal also looked to hire another developer during my time as an intern, where I contributed by introducing the concept of a coding challenge to their process and helped evaluate responses to the coding challenge.

When I returned to Blue Copal full-time, I was tasked with continuing the work with wattFlow, but also conceiving a plan to handle the market trading for GB energy. In collaboration with another developer, we used the concepts from wattFlow to create a plan for a system we called blueBell. This was a system that still had the basic requirements of reducing human error and making it easier to scale up the trading capacity, but this time speed was also crucial. For this, I created a library called FormulaBuilder which compiled a string into an Elixir function, but only from known tokens to avoid malicious inputs, which formed the base for allowing the traders to use a wider range of "strategies" without the blueBell code needing updating to try new things. The start of this project was done in my free time and can be found on my GitHub, but I cannot upload the final product due to IP restraints.

When the company wanted to hire two junior developers, I was put in charge of creating an Elixir code challenge, which I made not as a test of coding skills, but as a test of being able to handle learning a new language and concepts quickly so that we knew they would be able to contribute quickly when hired. Following this, I was involved in the CV assessment, code challenge response assessment (handled by myself only), interviewing and offer processes. When we decided on two candidates to hire, I also worked with the senior developer to create an onboarding process to help the juniors learn Elixir in just two weeks to a working standard.

From here I was a key part of mentoring the new junior developers. Without being their manager I was a point of contact between the most senior developer and the junior developers for honest conversations and any day-to-day issues that needed more time to explain.

This also became the introduction point of an agile-esque way of using Jira to iteratively work through projects with regular releases and non-blocking methods of adding features or fixing bugs. I regularly managed features from the whiteboard to the release, working with all levels of developers. This was on top of being the overall manager of the direction of two large systems. Due to naturally progressing into all of these roles and responsibilities, I was eventually promoted to Lead Developer for Blue Copal.

I am looking for new employment as a software engineer (from mid-senior roles) due to my current company closing down. This was due to a lack of capital and a bad run of trading decisions on the non-technical side, with the software being acquired by another company due to how impressed they were with it. My experience at Blue Copal would make me a great fit at any start-up company looking to rapidly build up new systems, but I also believe it would be useful to more established organisations that still want to ensure they have the mindset of working efficiently with freedom for their developers to make good choices. I was not hoping to be in this position as I saw this job as long-term, and I would like to join a company where I can have a career not just a temporary solution for employment.

Thank you for taking the time to read my cover letter. I look forward to your response.