Patrick Rickles
Head of Business Intelligence and Spatial Data Science

Job title: Head of Business Intelligence and Spatial Data Science
Organisation: HM Courts and Tribunals Service
Location: London, UK

How did you get to where you are now?

I started off with a B.S. in Computer and Environmental Sciences from Rochester Institute of Technology (Rochester, New York) and then completed an MSc in Geographic Information Science at University College London (UCL). I wanted to see how Geographic Information Systems (GIS) were applied in different industries and ended up working in oil and gas, software engineering, defence contracting, urban planning, environmental remediation and transportation in private sector organisations in the US and UK. I also ran my own company for a while, developing bespoke geospatial web solutions for clients.
I'd always wanted to pursue a PhD, and so after successfully securing a full-time Research Associate position at UCL, I undertook a part-time PhD and closed my company. It was difficult working a job and doing research at the same time, but I managed to do so thanks to the support of my loved ones (and lots of coffee). I was

curious about the public sector and how I might be able to apply my skills and knowledge to positively impact policies and decision making. I worked in the Ministry of Housing, Communities and Local Government, developing systems to ensure analysts and the public can easily access departmental geospatial information. I am currently at HM Courts and Tribunals Service (an Executive Agency of the Ministry of Justice), leading teams on data visualisation, solutions architecture and spatial analyses, such as travel time calculations.

Was there anything particularly useful that helped you get into this role?

I gained my experience through working at a variety of organisations using different technologies and quickly understanding how to create solutions with them. I previously researched topics such as Human Computer Interaction (HCI), User Experience (UX) / User Interfaces (UI) design, and Colour Science Theories and Principles (namely through cartography), which were desirable for my current role. I also have practical experience in usability testing, conducting interviews and designing and deploying surveys. My qualifications as a project manager also proved to seniors that they could trust me to manage stakeholders and deliver results. As part of my PhD research was on educational approaches, they also knew I could construct and deliver high quality training.
I found out about this role through a networking event, so I recommend meeting people and sharing the work you do – you never know what opportunities could come from it.

What do you do as part of your role?

The main part of my role is to manage a team and more widely promote best practice in data visualisation and incorporate GIS to enrich outputs. I lead on integration of Esri, Microsoft and open source technologies, which includes ArcGIS Online, Power BI, Azure, and R, to

deploy a seamless suite of business critical Management Information (MI) reports. I am actively building the organisation's geospatial data capabilities and repositories, training people across the Ministry of Justice and acting as the department's representative for Esri, Ordnance Survey and Microsoft. I also ensure that spatial analyses are done correctly, advising on methodologies, robust resources and service providers. I regularly chair meetings with stakeholders to capture and incorporate feedback and present team outputs to seniors. I'm involved with the construction of training materials and provide one-to-one support, where necessary, to improve uptake of our products.

What skills and characteristics do you need for this role, apart from geographical knowledge?
Geographic knowledge is important in my current role, but it is only one of many skills I need. I lead on technology and direction for my team, guiding developers to ensure successful outputs. This requires management of projects, people, time and stakeholders' expectations. People skills are extremely important to maintain motivation and rapport. Genuine enthusiasm and interest in the subject area also helps. Patience is a virtue, albeit one that I sometimes have to work on!

What do you enjoy most about your job?
What I really like are the 'light bulb' moments. People love maps, but sometimes think they're extremely difficult to make. When I'm explaining how a map could better showcase the impact of certain information with a senior colleague, and they get excited because they didn't think that we had the capabilities in-house to make the map they need, that makes my day. When I'm training my team members on how to use GIS, and they understand why we're doing it and produce their own outputs without my guidance, that lets me know that I'm helping to create sustainable outputs.

What are the opportunities for career progression? Where might you be in five years' time?
I enjoy visually presenting information in an impactful way using innovative platforms. What professionally drives me is helping institutions realise the benefits from successful

implementation of cutting-edge technologies. I'd like to continue to move forward in this area, with a focus on deriving intelligence from spatial and non-spatial information to enable organisations to make informed decisions that provide value for money and sustainable results. Leading on digital transformation initiatives would be great, but failing that I could see myself on a sunny beach somewhere...

What advice would you give to someone wanting to go in to this career?
I actively seek out opportunities to showcase my skills in data visualisation and solutions architecture. Not every situation yields continued collaboration, but I still pursue them and help how I can. The people you meet along the way will remember you and your paths may cross again professionally, so it's important to make a good impression. Overall, establish your expertise, show people what you can do every chance you get and build a strong network of colleagues and friends.

How do you maintain your knowledge and interest in geography outside of work?
I'm one of the Deputy Heads of the Government Geography Profession. I keep up to date on events that are going on, engage in public speaking at schools and universities, and provide mentorship to people seeking to further develop their careers. I'm also a Chartered Geographer (GIS) through the RGS-IBG and regularly attend socials and seminars to meet new people and keep on top of topics of interest and advancement in geography.

Why did you choose geography? Why should others choose geography?
Initially, I wanted to be a video game developer and started my undergraduate studies in Computer Science. For undergraduate degrees in the US, you also have to take electives in general science, so I chose Environmental Science. I came to enjoy that as much as my main subject and was torn on which one to choose. I then took a course on Geographic Information Systems, decided that was what I wanted to do and the rest is history. I still play video games in my spare time, though.