James Clark

Skills

Communicator



Whether it's writing clear documentation or steering a meeting back on track, good communication is one of the absolutely essential skills of a software developer. I tailor my language to my audience, avoiding being overly technical where it would be unnecessary, acting as the translator of others where needed.

Polyglot



I have been programming professionally for over 23 years at this point, and have specialist knowledge of multiple languages. I can pick up pretty much anything without trouble. Modern software development rarely focuses on a single language for the entire stack - there is always going to be some unique scripting used for CI tasks, Infrastructure-as-Code, or end-to-end tests.

Delver



Software invariably accumulates tech-debt and bit-rot. Having worked on some extremely old projects, I've found that I actually enjoy digging into old codebases where nobody knows how things worked and there is no documentation. I like instrumenting and understanding legacy code, and feel rewarded when I can uplift it to modern standards.

Unifier



We work better together. Whether it's between Product and Tech, Devs and Testers, or people from different backgrounds and life experiences, I like to promote cameraderie within my team. It's better to have a team that feels comfortable with each other and un-stressed.

Experience

Senior Software Developer

Domain Group Oct 2022 - Feb 2024

Tightly integrating a modern Next.js React app with a legacy Java app, designing and building a user interface aimed at replacing critical workflows with a new framework that can enable speedier development.

- Collaboratively designing a new hybrid app structure with a crossfunctional team.
- Reverse-engineering existing Java code behaviour, documenting and reimplementing in Javascript.
- Transforming the user experience with Single-Sign-On and accommodating for legacy username requirements.
- Identifying and working around shortfalls with availability of data.
- Configuring app dashboards and enabling visibility of app behaviour and documentation of first-response protocols.

NextJS React Java Tomcat Tapestry Kibana PostgreSQL

Senior Software Developer

Domain Group May 2021 - Oct 2022

Building a greenfield responsive React app for comparative market analysis to compliment an existing product.

- Working closely with the API team to design a new API to service the requirements of the app while working within the constraints of the existing system and database design.
- Creatively managing integration issues discovered with late notice, pragmatically balancing tech debt and code quality to ensure on-time delivery.
- Bringing new team members up to speed, building out mocks, stubs and scaffolding to ensure the entire team can work in parallel with API and design developments.
- Aiding Product and design to ensure the best possible UX and feature set can be available while taking potential pitfalls into account.

- Utilising Infrastructure-As-Code via AWS CDK to ensure repeatability of deployments and consistency of app environments.
- Exploring, assessing, and implementing PDF creation workflows.

 NextJS React Emotion Redis Puppeteer Cypress AWS CDK ELK Docker

Javascript Developer

Domain Group Mar 2020 - May 2021

Extending our Agent Portal with new features that are tightly integrated with the business' initiatives.

- Working closely with Product on a small focused team building out a new universal portal product that collates data from across the business into one convenient location.
- Taking ownership of the backlog, release management, sprint planning, and design.
- Integrating a new Early Access business-wide initiative allowing agents to promote properties before their full listing goes live.

NextJS React Modern CSS GraphQL Cypress ELK Docker

Perl Developer

Domain Group Nov 2016 - Mar 2020

Updating and uplifting our Agent Services CRM software. Working across the entire stack, from EC2 to frontend JS & CSS.

- Diving into a unique multi-feature CRM with a 20-year legacy and 200,000 users, navigating the challenges of BAU work alongside new product features and integrations.
- Uplifting the existing codebase to make use of modern paradigms and improvements. Changes to improve developer experience and reduce iteration time while improving deployment confidence.
- Auditing and improving security across the application, enabling Single-Sign-On and locking down administrative roles.
- Modernising infrastructure with containerisation, automated tests, multiple environments and more control over deployments.

- Enhancing observability with improved logging and visualisations, alerts, and developer-specific workflows to allow reverse engineering of application behaviour.
- Building up team culture and confidence with regular group learning sessions.
- Modifying the app to allow it to scale to a large userbase and efficiently handle custom feature sets.
- Responding to incidents, writing up post-mortems, and building new mechanisms for resiliency.

Perl Apache MySQL PHP jQuery AWS Git Jenkins ELK Kibana Grafana Docker Python

Senior Software Developer

The University of Sydney
May 2005 - Apr 2014

Working on the GPlates project, an open-source C++ / Qt application for modelling information and motion of tectonic plates through geological time.

- Working closely with professors and students to gather requirements.
- Creating and documenting an information model to encompass existing and future data needs.
- Building a cross-platform C++ application visualising plate tectonic models in 3D across geological time.
- User interface design and implementation using modern desktop best practices, conforming to multiple platform conventions.
- Updating tooling and documentation for the information model to keep up with standards and new data requirements.

C++ Python Qt XML SVN Geoscience

Education

Bachelor of Computer Science and Technology (Honours)

The University of Sydney Feb 1999 - Nov 2002



- Studied programming in areas of algorithms, data structures, optimisation, network security, cryptography, 3D graphics, network programming, and artificial intelligence.
- Learned techniques of database design and creation, object—oriented design, distributed processing, and user interface design.
- Honours Project: Machine Learning to automatically classify email between user-defined categories, using Neural Networks and Genetic Algorithms.

Java C C++ Prolog Matlab Perl Python Bash UNIX

Publications

- J. Clark, I. Koprinska, J. Poon (2002). "LINGER A Smart Personal Assistant for E-mail Classification", in *The Proceedings of the 13th International Conference on Artificial Neural Networks*, ICANN'2003, Istanbul, Turkey, 274-277.
- J. Clark, I. Koprinska, J. Poon (2003). "A Neural Network Based Approach to Automated E-mail Classification", in *The Proceedings of the IEEE International Conference on Web Intelligence*, WI'2003, Halifax, Canada, 702-705, IEEE Computer Society Press.
- I. Koprinska, F. Trieu, J. Poon and J. Clark (2003). "E-mail Classification by Decision Forests", in *Proceedings of the Australasian Document Computing Symposium*, ADCS'2003, 41-46.
- I. Koprinska and J. Clark (2004). "Video Summarization and Browsing Using

Growing Cell Structures", in *IEEE International Joint Conference on Neural Networks*, IJCNN'2004, Budapest, Hungary, 2601-2606, vol. 4, IEEE Computer Society Press.

- I. Koprinska, J. Clark, and S. Carrato (2004). "VideoGCS A Clustering-Based System for Video Summarization and Browsing", in *Proceedings of the Sixth COST 276 Workshop "Information and Knowledge Management for Integrated Media Communication"*.
- M. Saberi, S. Carrato, I. Koprinska, and J. Clark (2005). "Estimation of the Hierarchical Structure of a Video Sequence Using MPEG-7 Descriptors and GCS", in *Proceedings of the 9th International Conference on Knowledge-Based Intelligent Information and Engineering Systems*, KES'2005, Melbourne, Australia, 8-15, Lecture Notes in Computer Science 3682.
- I. Koprinska, J. Poon, J. Clark, J. Chan (2007). "Learning to Classify E-mail", in *Information Sciences 177*, 2167-2187, Elsevier.

Links



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References by request.

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