

Cole Morton

Senior Software Engineer | AI-Augmented Development | Full-Stack Architecture

Brisbane QLD 4032 | cole.morton@hotmail.com | [0415 583 331](tel:0415583331)

linkedin.com/in/cole-morton-72300745 | colemorton.com | github.com/colemorton

Professional Summary

Senior Software Engineer with 11+ years delivering enterprise-grade systems across fintech, healthtech, and digital commerce platforms. Career progression from foundational commercial roles building healthcare systems for Australian hospitals and frontend platforms for German startups, to advanced independent technical leadership architecting generative content systems and quantitative trading software. Demonstrated expertise spans from .NET enterprise applications, to React/ReactNative/Angular web/mobile applications and cutting-edge AI tooling. Proven ability to scale development teams, deliver under regulatory compliance requirements, and architect scalable production systems. Currently building agentic AI pipelines, personal web-site, data analysis, and N8N automation as demonstrated through daily GitHub contributions over the past year. Actively seeking opportunities to contribute deep commercial expertise and modern development practices to Brisbane's thriving tech scene.

Core Competencies

- Full-Stack Technical Expertise: 11+ years from .NET enterprise foundations to modern React/TypeScript/Python stacks with quantitative analysis capabilities
 - Team Leadership & Scaling: Grew CrossLend development team from 3 to 20+ developers while maintaining platform stability and regulatory compliance
 - Regulatory Systems Experience: Healthcare compliance (hospital oncology systems), FinTech regulations, enterprise-grade reliability across critical applications
 - Production Systems Architecture: Hospital systems, fintech lending platforms, React Native applications, institutional-grade content generation systems
 - Independent Technical Leadership: Architected platform processing 20+ financial APIs, delivered complex projects as sole developer
 - Global Experience, Brisbane Established: Proven delivery across Australia, Germany, New Zealand with current Brisbane residence and local availability
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Skills

Frontend Technologies

- **React, TypeScript, NextJS**, Astro, Vue, Angular, React Native, TailwindCSS, JavaScript, HTML5, CSS3

Backend Technologies

- **NodeJS, FastAPI**, Express.js, PrismaORM, Python 3.10, Data Processing (Pandas, NumPy), .NET, C#

AI & Modern Technologies

- **Claude Code, Cursor IDE**, Open Router, GenContentOps, AI-augmented development

Domain Expertise

- **PWA, SPA, Full-stack architecture**, Interactive dashboards, Finance & Trading Systems, Data Processing & Visualization, AI-driven content generation, Automation scripts

Databases & DevOps

- **Git, NPM**, Webpack, Docker, PostgreSQL, GitHub (Actions), Travis CI/CD, Vercel, Netlify

Testing & Methodologies

- **Test Driven Development, End-to-End Testing, Agile/Scrum**, Playwright, Jest, Pytest, Unit Testing, SOLID principles, Kanban, DRY, KISS, YAGNI, Fail-fast principles
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Experience

Independent Software Developer & Personal Web Site | Sensylate Platform

August 2024 - Present | Brisbane, Australia

Generative Content Operations (GenContentOps): 20+ financial APIs and economic data integrated into institutional-grade content generation system.

- Architected enterprise-grade GenContentOps platform with 21-command AI orchestration integrating 20+ financial APIs, generating 100+ institutional-quality analyses achieving 9.2/10 maturity score
- Implemented multi-phase agentic workflow (DASVP) with contract-driven data pipeline, factory patterns, and automated quality gates ensuring 9.0+ confidence thresholds across all content generation
- Built full-stack platform using Python 3.10 backend with Astro 5.12+/React 19/TailwindCSS 4 frontend, demonstrating sophisticated service orchestration and multi-modal content generation at scale
- Developed 4-tier AI classification system (Infrastructure/Feature/Assistant/Sub-agents) with fail-fast validation, comprehensive audit trails, and institutional-grade compliance framework

Technologies: Python 3.10, TypeScript, Astro 5.12+, React 19, TailwindCSS 4, Pandas 2.0+, NumPy, Plotly, Pytest, Jinja2, Anthropic Claude Code, Open Router, Cursor

Project: [GitHub Repository](#) | [Web Site](#)

Quantitative Trading Systems Architect | Quantitative Analysis Suite

Dec 2022 - Present | Berlin, Germany

Comprehensive quantitative analysis toolkit for trading strategies and portfolio management with advanced risk analytics and optimization capabilities using Python, Pandas, and statistical modeling.

- Built distributed backtesting engine analyzing 1M+ strategy permutations across multi-decade datasets with memory-optimized processing and parallel execution using Python 3.10 and Pandas 2.0+
- Implemented comprehensive Value-at-Risk and Conditional VaR modeling with Kelly Criterion optimization and multi-factor risk attribution using NumPy, Plotly, and Seaborn
- Developed systematic portfolio construction with correlation-based risk clustering, efficient frontier visualization, and Monte Carlo stress testing
- Created advanced signal quality assessment with efficiency scoring algorithm and alpha generation analysis across concurrent trading strategies

Technologies: Python 3.10, Pandas 2.0+, Polars, NumPy, Plotly, Seaborn, Pytest

Senior Software Engineer | Oetker Digital GmbH

Jul 2018 - Oct 2020 | Berlin Area, Germany

Developed enterprise web applications using React, TypeScript, and Node.js across diverse technology stacks. Collaborated cross-functionally with multiple teams using Agile/Scrum methodologies to deliver scalable solutions for restaurants, hotels, and businesses.

- Built progressive web applications (PWA) and single-page applications (SPA) using React.js, Vue.js, TypeScript, and Styled Components with Storybook for component development
- Implemented CI/CD pipelines with GitHub Actions, automated testing using Jest and Cypress, and optimized build processes with Webpack
- Developed backend APIs using Node.js, Express.js, and Apollo GraphQL with PostgreSQL database integration using Prisma ORM
- Collaborated in fast-paced Agile environment with seamless cross-team collaboration and rapid prototyping of innovative solutions

Technologies: React.js, Vue.js, TypeScript, Styled Components, Storybook, Node.js, Express.js, Apollo GraphQL, Prisma ORM, PostgreSQL, Jest, Cypress, Webpack, GitHub, VSCode

Senior Software Developer | Panorama Berlin

Mar 2018 - Jun 2018 | Berlin Area, Germany

Developed React Native mobile application for fashion show QR ticket scanning solution, serving both event staff and attendees with real-time monitoring and error tracking.

- Architected and developed React Native mobile application with QR code scanning functionality for fashion show event management
- Implemented robust QR scanning feature with integration capabilities for booth promotions and special offers using Service Workers and PWA technologies
- Deployed production monitoring using Sentry for real-time error tracking and performance optimization across diverse mobile devices
- Delivered complete project on time with flawless QR code scanning functionality, earning direct invitation to join CTO at Oetker Digital

Technologies: React Native, React.js, Node.js, Express.js, PostgreSQL, PWA, Service Workers, Sentry

Senior Frontend Developer | Advertile Mobile

May 2017 - Nov 2017 | Berlin Area, Germany

Led frontend development for AppBounty iOS application using JavaScript and Express.js, driving high-velocity feature delivery through collaborative team environment.

- Developed high-quality features for iOS application using JavaScript, Express.js, and Gulp.js build system with GitLab version control
- Drove feature development from inception through deployment at high velocity using Agile methodologies and efficient team collaboration
- Engaged across full SDLC with focus on rapid prototyping and iterative development practices

Technologies: JavaScript, iOS Development, Express.js, Gulp.js, GitLab, VS Code

Senior Frontend Developer | Market Logic Software

Oct 2016 - Mar 2017 | Berlin Area, Germany

Developed search UI using React.js with modern frontend architecture including Redux state management, Redux-Saga for side effects, and comprehensive testing strategies.

- Built search user interface using React.js, Styled Components, Redux, Redux-Saga, ImmutableJS, Reselect, and Normalizr following latest ES7 standards
- Implemented modern frontend architecture with state management, data normalization, and performance optimization techniques
- Applied latest design standards and ES7 features for scalable and maintainable codebase

Technologies: React.js, Styled Components, Redux, Redux-Saga, ImmutableJS, Reselect, Normalizr, ES7

Senior Frontend Developer | CrossLend GmbH

Jul 2015 - Jun 2016 | Berlin/Luxembourg

Led development team scaling from 3 to 20+ developers while building fintech lending platform with React.js, ensuring regulatory compliance and platform stability throughout rapid growth.

- Scaled development team from 3 to 20+ developers while maintaining platform stability and regulatory compliance in fintech environment
- Introduced React.js to fintech startup, building lending platform with PostgreSQL database and Test Driven Development practices
- Implemented Continuous Integration pipelines and maintained high standards during rapid team expansion and platform growth
- Ensured regulatory compliance and accuracy in financial technology environment with enterprise-grade reliability

Technologies: React.js, Angular.js, PostgreSQL, Test Driven Development, Continuous Integration

AngularJS Web Developer | Dievision Agentur für Kommunikation GmbH

Sep 2013 - Jul 2015 | Berlin Area, Germany

Led frontend development for major German banking client using AngularJS, Node.js, and comprehensive testing framework with Karma and Protractor for enterprise-grade application.

- Led frontend development for major German banking client, architecting scalable AngularJS application from conception to deployment
- Implemented comprehensive testing strategy using Karma and Protractor, ensuring robust unit and end-to-end test coverage
- Built enterprise banking application using Node.js, AngularJS, GruntJS task runner, and Bower package manager with seamless testing integration
- Delivered high-quality banking software with focus on security, performance, and regulatory compliance requirements

Technologies: AngularJS, Node.js, GruntJS, Bower, Karma, Protractor, JavaScript, CoffeeScript, HAML, SASS, CSS

.NET Software Developer | Charm Health Pty Ltd

Jan 2012 - Apr 2013 | Brisbane, Australia

Developed critical healthcare systems for Australian hospitals using .NET stack, including oncology and patient management system for Chris O'Brien Lifehouse at Royal Prince Alfred Hospital with strict regulatory compliance.

- Developed WCF API services for drug list generation and updates across multiple hospitals with healthcare regulatory compliance
- Built oncology and patient management system for Chris O'Brien Lifehouse at Royal Prince Alfred Hospital using .NET, C#, and SQL Server
- Ensured strict regulatory compliance in healthcare software development, understanding critical nature of patient outcome accuracy
- Delivered compliant healthcare solutions meeting stringent regulatory requirements while maintaining system reliability for critical hospital operations

Technologies: .NET, C#, WCF, WCF Services, ASP.NET, Silverlight, SQL Server, Entity Framework 4/5, SignalR, RESTful Services

MVC.NET Software Developer | ISAC New Zealand Ltd

Oct 2009 - Jan 2012 | Auckland, New Zealand

Developed enterprise time tracking and job request management system using ASP.NET 4 and C# 4.0, contributing to Door2More freight tracking system for DHL Global Freight with scalable database architecture.

- Developed comprehensive time tracking and job request management system using ASP.NET 4 and C# 4.0 with SQL Server 2008 and Entity Framework
- Contributed to Door2More web-based freight tracking management system for DHL Global Freight with real-time tracking capabilities and enterprise-grade reliability
- Implemented robust business logic for resource allocation and project management workflows with scalable database architecture
- Established foundation in enterprise software development practices, database design principles, and commercial application deployment

Technologies: ASP.NET 4, ASP.NET MVC, C# 4.0, SQL Server 2008, Entity Framework, Object-Oriented Programming

Education

Diploma in Software Development | Computer Power Institute

2008 - 2009 | Christchurch, New Zealand

Major: MCAD (Microsoft Certified Applications Developer) specializing in C# and ASP.NET development. Comprehensive training in Microsoft technologies, object-oriented programming principles, and enterprise application development.

LinkedIn Skill Endorsements

Professional Validation: 23 skills with peer endorsements across 11+ years commercial experience spanning three countries. These endorsements represent validation from colleagues, clients, and industry professionals who have directly observed my technical capabilities in professional environments.

Most Endorsed Skills

- JavaScript (19 endorsements), ASP.NET (12 endorsements), C# (11 endorsements), LINQ (10 endorsements)
 - Entity Framework (9 endorsements), .NET (9 endorsements), SQL Server (8 endorsements), Agile Methodologies (7 endorsements)
 - Web Development (6 endorsements), jQuery (5 endorsements), HTML (5 endorsements), CSS (5 endorsements)
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Key Additional Information

- **Open Source:** Active GitHub contributor with daily commits over past year
- **Languages:** English (Native), German (Working Proficiency)
- **Work Rights:** Full Australian work rights (New Zealand citizen)
- **Location:** Brisbane-based, open to hybrid arrangements