

Matthew Collins

Mobile: +44 7494 108 343 | **Email:** modish0161@gmail.com

Locations: Manchester (UK) - Open to Remote & Hybrid

Occupations:

- Senior Software Engineer/Blockchain Developer
- Senior Architectural Technologist
- Senior Web Developer
- Editor-in-Chief/Financial Analyst
- Artist & Musician

About Me

Career Profile

With 15+ years across software engineering, AI systems, blockchain and architectural technology, I design and ship production-grade LLM platforms and full-stack applications. I work end-to-end in Python and TypeScript/Node.js on AWS/Azure, specialising in RAG (ChromaDB + Sentence-Transformers), multi-agent orchestration, and SSE token streaming with cancellation and telemetry. I build token-aware ingestion pipelines (PDF/TXT → clean → chunk → embed → index) with source attribution and evaluation harnesses to keep outputs factual and compliant. Beyond text systems, I develop TypeScript + Three.js parametric modelling with Python optimisation that converts design intent into live geometry and exportable artefacts, cutting early optioneering by ~30%. I treat AI as software: containerised local models (Ollama), config-as-code prompts, observability, and PII/safety guardrails.

Key Achievements:

- **Web Development:** Engineered responsive, user-centric web applications using React.js, Next.js, and Tailwind CSS, delivering optimal performance, seamless user experiences, and scalable architectures.
- **Blockchain & Web3:** Designed, developed, and deployed smart contracts (ERC-20, ERC-721, ERC 1155) while building decentralised applications (dApps) powered by Ethers.js, Web3.js, and Hardhat, supporting cross-chain functionality and secure token management.
- **Backend Integration:** Implemented robust backend systems with MongoDB, Django, AWS, Flask, and Node.js, seamlessly integrating payment gateways like Stripe, Plaid, Clerk, Auth0, and PayPal to streamline payment processing and enhance user experience.
- **Cloud Infrastructure:** Orchestrated scalable, high-availability cloud deployments on AWS and Azure, leveraging cloud-native services to support continuous uptime, load balancing, and advanced security protocols.
- **API Development:** Built and deployed secure, efficient APIs using Python, Postman, and the Rapid API platform, facilitating smooth integration with external services, real-time data exchange, and enhanced system interoperability.
- **LLMs & RAG:** Architected retrieval-augmented generation using ChromaDB + Sentence-Transformers with token-aware chunking, metadata and source attribution; reduced editing loops and improved factual consistency for long-form technical reports.

- **Multi-agent systems:** Orchestrated tool-using agents (Python/TypeScript services) for drafting, retrieval, cross-checking and formatting; accelerated first-pass document production while maintaining CG 300 structure and Eurocode references.
- **Streaming generation & UX:** Implemented Server-Sent Events (SSE) token streaming end-to-end (Flask → React/TypeScript) with cancellation, timeouts and progress telemetry for responsive, large-document generation.
- **Prompt engineering & evaluation:** Designed constraint-driven prompts (headings, note markers, compliance rules) and a regression test harness with “golden” I/O snapshots to prevent prompt drift and preserve tone/structure across releases.
- **Vector data pipelines:** Automated ingestion of PDF/TXT corpora (clean → chunk → embed → index), added deduplication and incremental updates, and implemented graceful fallbacks when the vector store is unavailable.
- **Local LLM MLOps:** Containerised Ollama models, added configuration-as-code for prompts/params, and instrumented timing, token/cost and cache hit-rates; exposed health endpoints for operational visibility.
- **Safety, compliance & governance:** Added input/output validation, PII scrubbing, prompt-injection guards and citation thresholds; enforced human-in-the-loop sign-off for safety-critical content and approvals.
- **Parametric modelling (TypeScript + Three.js + Python):** Built a parametric engine that auto generates bridge options from key inputs (span, skew, clearance), updates geometry/quantities in real time and integrates with BIM/CAD, cutting early optioneering time by ~30%.

My commitment to continuous learning has driven me to actively participate in boot camps, advanced courses, and formal education, mastering emerging technologies and methodologies to remain at the forefront of the industry. I recently completed a dynamic boot camp, earning a Gold Award, where I refined my expertise in Python, HTML, CSS, React.js, JavaScript, Microsoft Azure, and AWS (S3).

Currently, I am pursuing an MSc in Financial Technology (FinTech) at Manchester Metropolitan University, further enhancing my knowledge of blockchain, DeFi, and financial innovation. In September 2025, I am set to begin a PhD in Blockchain & AI, where I will conduct cutting-edge research into decentralised technologies and their transformative impact on financial systems.

I am dedicated to delivering high-quality, future-proof software solutions that drive business success and meet the evolving needs of users. I am now seeking senior software engineering roles where I can apply my extensive skill set to tackle complex challenges and contribute to pioneering projects.

Technical & Software Engineering Proficiency

With a comprehensive foundation in software engineering, I deliver secure, scalable systems across front-end and back-end development, AI/LLM platforms, blockchain, and cloud infrastructure. My toolkit spans modern languages, frameworks and DevOps practices that support high-performance, observable and compliant software.

AI Systems Engineering

- RAG pipelines: Retrieval-augmented generation with ChromaDB / Pinecone and Sentence Transformers, including PDF/TXT ingestion, cleaning, token-aware chunking, metadata/citation tracking and incremental re-indexing.
- Multi-agent orchestration: Tool-using agents (Python/TypeScript services) for retrieval, drafting, verifying and formatting; deterministic hand-offs and retries to improve reliability at scale. • Streaming generation & UX: Server-Sent Events (SSE) from Flask to React/TypeScript for token-by token updates, cancellation, timeouts and progress telemetry on long documents.
- Prompt engineering & evaluation: Constraint-led prompts (structure, note markers, compliance rules), regression “golden” tests, and automatic prompt-drift detection.
- Model ops: Local model hosting with Ollama, config-as-code for prompts/params, per-section token budgeting and caching; health/metrics endpoints (latency, token use, cache hits).
- Safety & governance: Guardrails for prompt-injection, PII scrubbing, citation thresholds and human in-the-loop sign-off for safety-critical outputs (e.g., CG 300 / Eurocode references).
- Parametric workflows: TypeScript + Three.js parametric engine with Python optimisation to generate geometry/options from key inputs (span, skew, clearance), driving BIM/CAD exports and cutting early optioneering time by ~30%.

Web3 Development & Blockchain Expertise

- Blockchain Networks & Protocols: Proficient in working with blockchain ecosystems such as Ethereum, Polygon (Mumbai Test and Production Builds), Goerli (Testnet), Rinkeby (Deprecated), Sepolia, and Cronos POS Chain (Coinbase Layer-Zero).
- Smart Contract Development: Hands-on experience in developing, auditing, and deploying smart contracts, including ERC-20, ERC-721, ERC-1155, and ERC-720 standards.
- Blockchain Development Tools: Skilled in essential Web3 tools and libraries, including IPFS, Infura.io, Pinata, Alchemy Web3 API/SDK, Ethers.js, Solidity, Remix, OpenZeppelin, and Hardhat. I am adept at managing interactions with node modules through CLI frameworks.

Full-Stack Software Development

- Front-End Development: Advanced proficiency in creating interactive user interfaces and responsive web applications using React.js, Next.js, Tailwind.css, Redux, Framer Motion, Shadcn UI, Aceternity, Material UI, and TypeScript.
- Back-End Development: Strong experience in server-side development and backend logic using Python, Django, Flask, Node.js, SQL, Golang, Drizzle ORM, Pinecone DB, and MongoDB. • API Integration & Development: Skilled in building APIs for seamless application-to-application interaction using Python, Postman, and the Rapid API platform.

Cloud Platforms & Infrastructure

- Cloud Platforms: Expertise in cloud-based application deployment using AWS, Azure, Docker, and Amazon S3, ensuring scalable, secure, and globally distributed infrastructures.
- Continuous Integration/Continuous Deployment (CI/CD): Utilise AWS, Azure DevOps, and containerised Docker environments to support continuous deployment pipelines and system scalability.
- Cloud-Native Tools: Proficient in development tools like Postman, VS Code, and GitHub for seamless version control, testing, and continuous integration.

Web2 & Payment Solutions

- **Payment Gateway Integration:** Built end-to-end payment functionalities using Stripe, PayPal, Clerk, and Auth0 APIs to facilitate frictionless payment processing and secure authentication for Web2 and Web3 builds.
- **E-Commerce & Financial Transactions:** Applied payment infrastructure for financial technology projects, enhancing transaction efficiency and user security through encrypted and multi-sig protocols.

Design, Multimedia & Visualisation Tools

- **Design & UI/UX:** Mastery of design and prototyping tools, including Adobe Photoshop, Illustrator, InDesign, Autodesk AutoCAD, 3DS Max, Adobe After Effects, Figma, Spline, and Cinema4D.
- **3D Visualisation & CAD Design:** Experienced in creating architectural models, 3D visual walkthroughs, and spatial designs, applying design thinking from an architectural perspective to user experience design in web and software development.

Additional Technical Competencies

- **Development Libraries & Utilities:** Skilled in managing critical libraries and SDKs, including Axios, Vercel, Clerk-Auth, Web3Modal, Metamask, WalletConnect, WalletLink, and Formatic Wallets/API SDKs.
- **Collaboration & Documentation Tools:** Proficient in leveraging tools like Evernote, Google Docs, Dropbox, Draw.io, Mermaid.live, and Eraser.io for project documentation, version control, and team collaboration.
- **Music & Sound Engineering:** Comprehensive knowledge of music production software such as Cubase 12, Native Instruments, Waves Central, Pro Tools, and Ableton Live, showcasing a creative, multi-disciplinary skill set.

Technical Mindset & Approach

I fuse systems-level engineering with creative problem-solving to deliver production-grade AI and full-stack solutions that bridge traditional software and the evolving blockchain/Web3 landscape. With hands-on expertise in Python, TypeScript and smart-contract tooling - plus ongoing work with LLMs (RAG, multi-agent orchestration, streaming) and cloud MLOps - I ship secure, scalable, future-ready platforms with strong observability and human-in-the-loop safety. This blend of technical mastery, rigour and adaptability positions me to lead transformative projects, drive innovation and push the boundaries of modern software and decentralised development.

Authored Publications

- **Accelerate Your Wealth - MJ COLLINS: The Ultimate Guide to Fastlane Success**
- [Check out the book on Amazon UK](#)
- **The Fastlane Entrepreneur - MJ COLLINS: How to Build a Business That Generates Significant Income Quickly**
- [Check out the book on Amazon UK](#)
- **Fast Track to Riches - MJ COLLINS: The Entrepreneur's Guide to Building a Profitable Business**
- [Check out the book on Amazon UK](#)
- **The Money Maker's Playbook: Strategies for Maximising Your Earnings in 2023**
- [Check out the book on Amazon UK](#)

Contact Information

- **Software Engineering:** modish0161@gmail.com
- **Design Company:** machudesigns@gmail.com
- **Financial Freedom:** moolah0161@gmail.com

- **LinkedIn:** [Matthew Collins on LinkedIn](#)

Experience

Systems Engineer - AI Designer

Beaver Bridges Ltd | Manchester & Shrewsbury, UK | Apr 2025 - Present | Full-time, On-site

AI-driven bridge design: Spearheading ML tools to optimise structural layouts, materials selection and cost models; reduced early-stage design time by ~30%.

Systems engineering leadership: Introduced version control, automated tests and CI pipelines to raise software reliability for safety-critical delivery.

Cross-disciplinary collaboration: Embedded with civil, structural and fabrication teams to translate requirements into digital workflows compliant with UK codes and ESG goals.

Data-informed decision-making: Integrated AI analytics into BIM/CAD to provide real-time performance metrics that accelerate approvals.

Parametric modelling:

- **Balanced:** Built a TypeScript + Three.js parametric engine with Python services that auto-generates bridge options from key inputs (span, skew, clearance), updating geometry, quantities and drawings in real time - cutting early optioneering time by ~30%.
- **Optimisation-led:** Coupled a TypeScript/Three.js parametric model with Python multi-objective optimisation (cost, carbon, constructability) to explore thousands of variants and surface best-value, code-compliant solutions.
- **Compliance-first:** Embedded DMRB/Eurocode rule checks in TypeScript validators and Python checks so the parametric model flags non-compliance at source, reducing rework and accelerating approvals.
- **Fabrication-ready:** Drove export-ready outputs from the TypeScript/Three.js parametric model (geometry, schedules, cut-lists) into BIM/CAD workflows, reducing hand-offs and errors between design and manufacture.

Founder & CEO | Zero Blockchain.xyz & Zero Bank | Manchester, UK | March 2023 - Present

Websites: [Zero Blockchain](#) | [Zero Bank](#)

GitHub Smart Contracts: [Smart Contracts Deployed](#)

Blockchain Development & Smart Contracts:

- Engineered and deployed an extensive range of smart contracts (ERC-20, ERC-721, ERC-1155), leveraging networks like Ethereum, Polygon (Mumbai Test Builds), Cronos POS Layer-Zero, and testnets (Goerli, Rinkeby).
- Integrated industry-standard tools (Solidity, Remix, Hardhat, OpenZeppelin) and utilised Infura.io, Pinata, IPFS, and AlchemyWeb3 APIs for reliable on-chain interaction.

- Maintained a dedicated GitHub repository of deployed smart contracts, ensuring transparency, code quality, and continuous improvement.

Zero Bank - Decentralised Financial Services:

- Conceived and developed Zero Bank, a decentralised banking platform providing secure asset management, fiat-to-crypto payment gateways, and intuitive user interfaces.
- Combined Ethers.js, Web3.js, React.js, Next.js, and Tailwind.css to deliver frictionless dApps and DeFi experiences, prioritising compliance, user trust, and scalability.
- Integrated payment solutions (Stripe, PayPal) and authentication methods (Auth0, Clerk) for seamless Web2/Web3 interoperability.

Web3 & dApp Development:

- Built cutting-edge dApps and interfaces using Solidity, Ethers.js, and Web3.js, streamlining node module interactions and terminal CLI deployments.
- Employed React Native, Redux, React Query, Framer Motion, and Shadcn UI to enhance front-end responsiveness, accessibility, and overall user experience.

Cloud Platforms & Backend Integration:

- Deployed scalable applications on AWS and Azure, ensuring high availability, fault tolerance, and robust security measures.
- Implemented efficient backend systems using Python, SQL, Django, Flask, Golang, Drizzle ORM, Pinecone DB, and MongoDB.
- Developed and deployed APIs using Python, Postman, and Rapid API, ensuring seamless integration and reliable data exchange.

Community Engagement & Education:

- Fostered a vibrant community via Discord, encouraging user feedback, knowledge sharing, and developer collaboration.
- Organised NFT "Space Race" events to promote digital artists, increase platform participation, and amplify brand presence within the blockchain and NFT communities.

Technology Stack:

- Proficient with Solidity, Ethers.js, Web3.js, Python, JavaScript, React.js, Next.js, Node.js, Tailwind.css, AWS, Azure, and various Web3 frameworks.
- Continually refine skills, staying at the forefront of blockchain innovations, decentralised finance protocols, and emerging Web3 standards.

Outcome:

- Under my leadership, Zero Blockchain and Zero Bank have grown into an integrated, secure, and user-centric blockchain ecosystem. By merging advanced on-chain functionality with user-friendly fintech services, I've created a pioneering platform that bridges the gap between traditional finance and the decentralised world.

- **Portfolio:** Showcased various projects and art collections on platforms like OpenSea, Crypto.com, and Niio. Managed digital art curation and NFT projects through ZeroArt Curation.

- [ZeroArt Curation](#)

- [GitHub Projects](#)
- [Portfolio](#)

Managing Director and Senior Software Engineer

Modish 0161 | Manchester, UK | March 2023 - Present modish0161.com

- Web Development: Created responsive, user-friendly web applications using React.js, Next.js, and Tailwind.css, ensuring optimal performance and scalability.
- Blockchain and Web3: Developed and deployed smart contracts (ERC-20, ERC-721, ERC-1155) and built decentralized applications (dApps) utilizing technologies such as Ethers.js, Web3.js, and Hardhat.
- Backend Integration: Implemented efficient backend systems using MongoDB, Django, AWS, Flask, and Node.js, integrating payment gateways like Stripe, Plaid, Clerk, Auth0, and PayPal for seamless transaction processing.
- Cloud Services: Leveraged AWS and Azure for deploying scalable applications, ensuring high availability and security.
- API Development: Built and deployed APIs using Python, Postman, and Rapid API platform for seamless integration and functionality.
- Continuous Learning: Completed various bootcamps and advanced courses, mastering new technologies and methodologies. Recently earned a Gold Award in a dynamic bootcamp, honing skills in Python, HTML, CSS, React.js, JavaScript, Microsoft Azure, and AWS (S3).
- Technology Stack: Proficient in Python, JavaScript, React.js, Three.js, P5.js, Tailwind.css, TypeScript, Next.js, Ethers.js, AWS, Azure, Solidity, and Web3 Development.
- Design and Multimedia Tools: Utilized design tools such as Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Autodesk AutoCAD, Autodesk 3DS Max, Autodesk 3D Viz, Adobe After Effects, Figma, Spline, Cinema4D.
- Additional Skills: Cryptocurrency trading, Microsoft 365, Mermaid.live, Eraser.io, Draw.io, Evernote, Dropbox, Google Docs, Cubase 12, Native Instruments, Solid State Logic, Waves Central, Pro Tools, Fab-Filter, Reason 12, Massive X, Omnisphere 5.0, Soundtoys, iZotope, Serum, Ableton Live, Falcon UX.

Senior Architectural Technologist

MPSL - Contract | Manchester, UK (Through www.machudesign.xyz)

June 2022 - March 2023

- Implemented designs for a Sports Direct development in London and house types for a housing estate in Fleetwood.
- Compiled architectural drawings, Permitted Development Packages, and ensured Building Regulation Approvals.

Managing Director - Senior Architectural Technologist

Machudesign Ltd | Manchester, UK (My own Company - www.machudesign.xyz)

September 2019 - June 2022

- Coordinated business development, managed and designed various projects.
- Ensured compliance with SDS, Robust Details, and NHBC Building Regulations.
- Managed employees and assisted with projects.

Senior Architectural Technologist

NBDA - Northern Building Design Associates Ltd | Cheshire, UK

January 2019 - September 2019

- Drafted and supported architectural projects for clients like Odeon, IMAX, Cineworld, and HAVEN HOLIDAY PARKS.
- Interacted with fabricators and site installers to finalise exterior buildability.
- Compiled building shell technical drawings and working drawings packages for construction.

Freelance Designer, Architectural Technologist

Machudesign Ltd | Manchester, UK (Started my own company - www.machudesign.xyz)

April 2009 - July 2017

- Carried out projects such as housing extensions and conversions.
- Applied for planning applications and ensured building regulation compliance.
- Created and built websites with CSS scripts.
- Compiled 3D walkthroughs and architectural visualisations.

Designer / Architectural Technologist

Taylor Young Ltd | Handforth, Wilmslow, UK

May 2007 - April 2009

- Aided supervision of a housing estate with two hundred builds.
- Liaised with and advised site managers and clients.
- Independently outlined three-storey apartment blocks and housing schemes.

Architectural Technician / Draughtsperson

Lakesmere Ltd | Lymm, Warrington, UK

January 2005 - May 2007

- Drafted and supported architects, structural engineers, senior designers, drawing managers, purchasers, and quantity surveyors.
- Interacted with fabricators and site installers to finalise exterior buildability.
- Completed G.A. and technical drawings throughout all phases of design.

Other Relevant Design Work Experience

Pendragon Construction Ltd | Gatley, Stockport, UK

July 1998 - September 2006

- Trained in roofing and cladding systems, masonry, joinery, roofing systems, and renovation of houses.

Financial Work Experience

www.moolah.website(My own company)

July 2000 - September 2002

- Spearheaded the development of moo-lah.io as the Editor-In-Chief.
- Crafted and curated over 1500 articles covering a wide range of financial topics.
- Built the website from inception, showcasing a hands-on approach to the platform's creation.
- Authored engaging and

informative content to ensure a high-quality user experience. ● Actively contributed to both editorial tasks and technical aspects, creating and enhancing technical information and applications related to financial content.

- Played a pivotal role in shaping moo-lah.io into a comprehensive and impactful financial resource.

Data Input Specialist (Part-Time)

Cooperative Bank | Pyramid, Stockport, UK

July 2000 - September 2002

- Processed variable balance transfers (VBTs) and credit card applications in the evenings. ● Validated and input customer data for financial transactions.
- Ensured compliance with security and regulatory requirements.
- Managed customer records and conducted data quality checks.
- Verified authenticity of supporting documents.
- Collaborated with team members for efficient data flow.
- Handled system troubleshooting and reported issues.
- Maintained a strong focus on data security and confidentiality.

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- Managed customer records and conducted data quality checks.
- Verified authenticity of supporting documents.
- Collaborated with team members for efficient data flow.
- Handled system troubleshooting and reported issues.
- Maintained a strong focus on data security and confidentiality.
- Validated and input customer data for financial transactions.

Education

- **Manchester Metropolitan University (MMU)** | Sept 2024 - June 2025
 - MSc Financial Technology (FinTech) Sept 2024 - Sept 2025 (Distinction).
- **University Of Salford** | Sept 2001 - June 2005
 - BA Honors in Spatial Design/Architecture and Contemporary Structures.
- **Loreto Sixth Form College** | Sept 1999 - May 2001
 - Advanced GNVQ in Art and Design.
 - CLAIT (Computer Literacy & IT).
- **Thomas Holford R.C.H.S** | Sept 1994 - May 1999
 - 10 G.C.S.E's
 - Intermediate GNVQ Art & Design Advanced.

Awards & CPD

Education & Professional Memberships

- Chorlton Park Adult Education | Sept 2002 - May 2005
- Spanish Beginner ABC.
- Chartered Society of Design (CSD) | May 2004
- Awarded Membership
- Chartered Institute of Architectural Technology (ACIAT) | March 2006
- Granted Associate Eligibility to CIOB
- CSCS Operatives - Health and Safety Test | Aug 2006
- Salford University Alumni | Aug 2006
- Business Entrepreneurial Evening Classes (Trade through Design)
- Registered Kalzip Approved Contractors Designer Course | Nov 2007
- Registered Sarna-fil Course for Design | Mar 2007
- SFS Intec (RIBA, CPD) | May 2007
- CDM & Risk Assessment | June 2007
- Geo-Cel Dow Corning (RIBA, CPD) | July 2007

Blockchain & Web3 Certifications

- Certificate of Completion: Blockchain Learning Solidity
- Certificate of Completion: Building Web3 Decentralized Apps in Ethereum
- My Zero Blockchain Demo - [Link](#)
- Deployed Zero Coin (Series of Crypto-Currencies) - [Link](#)

Data Analytics & Microsoft Career Essentials

- Certificate of Completion: Career Essentials in Data Analysis by Microsoft and LinkedIn
- Certificate of Completion: Introduction to Career Skills in Data Analytics
- Certificate of Completion: Learning Data Analytics 1 - Foundations
- Certificate of Completion: Learning Data Analytics 1 - Foundations (Exam Passed)
- Certificate of Completion: Learning Data Analytics Part 2 - Extending and Applying Core Knowledge

KX & KDB Certifications

- KDB+/Q - Introduction to Databasing - KX Systems | Apr 2024
- KDB+/Q Developer Level 1 - KX Systems | Apr 2024
- Introduction to PyKX - KX Learning Hub
- KDB.AI Vector Database - KX Learning Hub
- KDB Architecture - KX Learning Hub
- KDB Developer Level 2 Course Completion - KX Learning Hub
- KDB Insights Enterprise Level 1 - KX Learning Hub
- KX Dashboards Course Completion - KX Learning Hub
- SQL for KDB Course Completion - KX Learning Hub

Software Engineering & Bootcamps

- Software Engineering - Skills-City Bootcamp (Gold Award) | Jan 2024
- A course covering building blocks and advanced technical skills for software engineering.
 - Course included:
 - Software Fundamentals
 - Building Responsive Web Applications (HTML, CSS, REACT, API's)
 - Advanced Python & Automation (OOP, Encapsulation, Inheritance, Polymorphism, Abstraction)
 - Microsoft Azure Fundamentals & Backend
 - Advanced Topics: DevOps, AI, and Game Engines
 - Python Essentials 1 (Cisco) - Completed up to Module 2.5 (Optional)
 - Python Essentials 1 (Cisco) - Completed up to Module 3.8 (Optional)

Business Analysis & AI Certifications

- Agile Requirements Foundations (Multiple Certificates)
- Business Analysis Foundations (Multiple Certificates)
- Business Analysis Foundations - Business Process Modelling
- Business Analyst and Project Manager Collaboration
- Business Benefits Realisation Foundations
- Ethics in the Age of Generative AI
- Generative AI - The Evolution of Thoughtful Online Search
- Introduction to Artificial Intelligence (2023)
- Learning Data Science – Understanding the Basics
- Managing Projects with Microsoft 365
- Project Management Foundations
- Requirements Elicitation and Analysis
- Requirements Elicitation for Business Analysts – Interviews
- SQL Server Fundamentals - Master Basic Query Techniques
- Streamlining Your Work with Copilot (formerly Bing Chat/Bing Chat Enterprise)
 - What Is Business Analysis?
 - What Is Generative AI?

Software Development & Design Portfolios, Some Other Handles in Projects Sections.

- [Matthew Collins - Space Portfolio-modish0161: Portfolio - React/Typescript](#)
- [Matthew Collins - Portfolio No.7: Portfolio - HTML5/CSS](#)

Music

- [Matt's Music](#)

Key Skills

Leadership & Management

- Managing Director, Project Manager – Senior Architectural Technologist
- Team Leadership & Cross-Functional Collaboration
- Agile Project Management & SCRUM Methodologies
- Business Analysis & Requirements Engineering
- Risk Management & Compliance (3LoD, ERM, AML/KYC)
- Feasibility Analysis of Surroundings & Urban Context

Blockchain, Web3 & Smart Contracts

- Blockchain Architecture & Development
- Solidity Smart Contract Development (ERC20, ERC721, ERC1400, etc.) • Hyperledger & DAML for Financial Assets
- Decentralised Applications (dApps) Development
- Tokenisation & Security Token Offerings (STO)
- Web3 Integration & Smart Contract Auditing
- Cross-Chain Liquidity & Oracle Integration

Data Analytics & Financial Engineering

- Data Science & Quantitative Analysis
- SQL & KDB+/Q for Time-Series & High-Frequency Data
- Python for Financial Modelling & Market Analysis
- Markov Process & Mean Reversion Trading Models
- AI & Machine Learning for Financial Forecasting
- Microsoft Azure & Cloud Data Engineering

Software Engineering & DevOps

- Senior Software Engineer (React, Node.js, Vue, TypeScript)
- Full-Stack Development & API Integrations
- Software Security & Ethical Hacking
- CI/CD, Kubernetes & Docker Deployment
- DevOps & Site Reliability Engineering (SRE)
- GitHub Actions, Jenkins, Terraform, and AWS

Enterprise IT & Databases

- SQL Server, NoSQL, and Distributed Ledger Technologies
- KDB+/Q High-Performance Data Analytics
- Enterprise Resource Planning (ERP) Systems
- Database Performance Optimisation
- Data Pipelines & ETL for Large-Scale Processing

Regulatory & Compliance Expertise

- Building Regulations & Planning Submissions
- Health & Safety Risk Assessment
- Construction Techniques & Blueprints
- Financial & Blockchain Compliance (AML, KYC, GDPR, MiCA)
- Commercial & Industrial Schemes – Concept to Detailed Stages

Software Development Frameworks & Tools

- React, Vue.js, Node.js, TypeScript, Next.js

- Python (Django, Flask, Pandas, TensorFlow)
- Solidity, DAML, Hyperledger Fabric, Canton Protocol
- SQL, PostgreSQL, MongoDB, KDB+/Q
- Microsoft Azure, AWS, Google Cloud Platform
- DevOps Pipelines (Jenkins, Kubernetes, Docker, Terraform)
- Web3.js, Ethers.js, Hardhat, Truffle

Professional Certifications & Training

- Blockchain & Smart Contract Development (LinkedIn Learning, Hyperledger, DAML) •
- Microsoft Data Analysis & Career Essentials
- KDB+/Q & Enterprise Database Systems
- Advanced Business Analysis & Process Modelling
- Agile & Project Management (Scrum, PMP, PRINCE2)

Soft Skills & Communication

- Effective Business Communication & Stakeholder Management
- Technical Documentation & Report Writing
- Public Speaking & Thought Leadership in Blockchain
- Cross-Team Collaboration & Negotiation
- Problem Solving & Critical Thinking

Additional Strengths

- Full CSCS Operative's Card
- Contemporary Structure & Spatial Design
- Software Engineering Bootcamp (Gold Award)
- Market Analysis & Algorithmic Trading Strategies
- Research & Development in Fintech & Blockchain

Software's

Category	Software/Technology
1. Frontend Technologies	HTML
	CSS3
	Tailwind.css
	JavaScript
	Redux
	React Query
	React Native
	Framer Motion
	React.js
	Shadcn UI
	Typescript

2. Blockchain and Web3 Development	Ethers.js
	Solidity
	DAML
	Web3.js
	Infura.io
	Pinata
	AlchemyWeb3
	Remix
	OpenZeppelin
	Hardhat
	Truffle
	Ganache
	Web3Modal (Deprecated)
	IPFS (Inter-Planetary File System)
	Etherscan.io

3. Smart Contracts	ERC-20
	ERC-720
	ERC-721
	ERC-777

	ERC-998
	ERC-1155
	ERC-1400
	ERC-4626

4. Blockchain Networks	Ethereum
	Polygon (Mumbai Test and Production Builds)
	Goerli (Testnet)
	Rinkeby-Testnet (Deprecated)
	Cronos POS Chain/layer-zero network (Coinbase)
	Avalanche

5. Web Development Tools and Libraries	Vercel
	Replit.io
	Discord
	Axios
	Clerk-Auth
	React.js
	Next.js
	Node
	Prisma
	MUI - React Component-Library
	RapidAPI
	Adobe Dreamweaver

6. Wallet Technologies	Metamask
	Core
	walletConnect
	walletlink
	Formatic Wallet

7. Traditional Web Development	Stripe/SDK/API
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	Firebase
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8. Backend Technologies	MySQL
	Django
	Flask
	Golang
	Drizzle ORM
	Pinecone DB
	MongoDB

9. Cloud Platforms	Docker
	Microsoft Azure
	Amazon Web Services (AWS)
	Amazon S3 buckets

10. General Programming Languages	Python
	Node.js
	JavaScript
	Processing 4.3 (MIT) (Open-Source)

11. Development and API Tools	Postman
	VS Code
	GitHub

12. Design and Multimedia Tools	Adobe Photoshop
	Adobe Illustrator
	Adobe InDesign

	Autodesk AutoCAD
	Autodesk 3DS Max
	Twinmotion
	Adobe After Effects
	Figma
	Spline
	Cinema4d

13. Other Tools	Microsoft 365
	Mermaid.live
	Eraser.io
	Draw.io

14. Note-taking and Organisation	Evernote
15. File Hosting and Collaboration	Dropbox
	Google Docs

16. AI and Machine Learning Technologies	ChromaDB
	Pinecone
	Sentence-Transformers
	Ollama
	TensorFlow

	Pandas
	Three.js (for parametric modelling and optimisation workflows)

	Sympy (for mathematical computations in AI pipelines)
	Networkx (for graph-based ML applications)
	Torch (for deep learning frameworks)
	OpenAI Embeddings
	Hugging Face

17. Music Software	Cubase 12 + VST 2 & 3 Plugins
	Native Instruments
	Solid State Logic
	Waves Central
	Pro Tools
	Fab-Filter
	Reason 12
	Massive X
	Omnisphere 5.0
	Soundtoys
	iZotope
	Serum
	Ableton Live
	Falcon UX1

Projects and Companies

- [Matthew Collins - Projects & Companies](#)

Details

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Senior Architectural Technologist Roles - Contact

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Thanks for Reading