

# www.necemon.com | necemon@live.com



#### **Profile**

- Full-Stack Senior Software Engineer: developing Mobile, Desktop and Web applications/services
- 15+ years of experience with C#/JavaScript Programming and Commercial/Financial Services
- CISI Certified Financial Engineer with a deep understanding of Capital Markets, Securities and Derivatives
- Master of Engineering (Computing, Swansea University), Microsoft Certified Solution Developer since 2008
- Meticulous, quick learner, hard worker with excellent Quantitative, Analytical and Management Skills
- FinTech Enthusiast and UI/UX Specialist: a smart blend of Technology, Quantitative Finance and Digital Arts
- · Versatile, multilingual personage with proven adaptability to diverse cultural and business environments

# **Career Highlights**

- <u>06/2024 Present:</u> Technology Consultant at Candriam (Financial Asset Managers, New York Life)
- <u>11/2020 05/2024</u>: Software Engineer (Contractor) at BNP Paribas (Corporate/Investment Banking) in Paris
- 10/2019 10/2023: CISI Professional Programme: certifications in Financial Markets, Securities & Regulations
- <u>02/2019 11/2020:</u> Software Engineer at Vanquis Bank (Leading Specialist Bank) in The City of London
- 10/2017 02/2019: Software Engineer at URIS/Ardonagh (Leading Insurance Brokers) in England
- <u>06/2016 09/2017:</u> Software Developer at Webigence (Microsoft Certified Partner) in London
- <u>03/2012 05/2016:</u> Software Developer at Golfbreaks (E-Commerce European Leader) in Windsor
- <u>12/2010 Present:</u> Part-Time Project Director at Evasium in London
- <u>11/2010 08/2011:</u> Web Developer (Trainee) at Pingar in Swansea
- 10/2010 06/2011: IT Officer at The Business And Economics Society in Swansea
- <u>06/2010 09/2010:</u> Web Developer (Intern) at General Electric (GE Energy) in Hyderabad
- <u>09/2009 06/2011</u>: Master of Engineering Student at Swansea University in Wales
- 07/2007 09/2009: Webmaster at the Association of Christian Christites in Bangalore
- <u>06/2007 09/2009</u>: Bachelor of Computer Applications Student at Christ University in Bangalore
- <u>11/2008 09/2016:</u> Microsoft Professional Solution Developer and Technology Specialist Certifications
- <u>09/2006 09/2009</u>: Software Engineering Student at NIIT in Bangalore

# **Key Technical Skills**

- Project Management: Planning, Problem Solving, Flexibility, Autonomy, Mentoring, Effective Communication
- Software Methodologies: SOLID principles, Design Patterns, TDD, BDD, Agile Development
- Performance: Asynchronous Programming, Caching, Multi-threading, Memory & Resources Management
- Web Applications: ASP.NET Web Apps (MVC/Core/Razor/WebForms), Blazor Server/WebAssembly
- Web Services: ASP.NET Web API, SOAP/REST Services, WCF, IIS, Reactive Extensions, Protocol Buffers
- Digital Arts & Web UI/UX: Photoshop, HTML, CSS, JavaScript, AJAX, TypeScript, ¡Query
- <u>Data Programming:</u> SQL, JSON, XML, XSLT, ADO.NET, LINQ, Entity Framework, SQL Server, Azure SQL
- Windows Programming: Windows services, WinForms applications, XAML/WPF applications
- Mobile Programming: Xamarin/MAUI, Android, iOS, Xamarin.Forms, Responsive Design, Bootstrap
- Testing: Unit Testing with MS-Test/NUnit/xUnit/Moq, Automatic Acceptance Tests with SpecFlow/Selenium
- DevOps/Architecture: Azure Cloud, Azure DevOps, Jira, TeamCity, CI/CD, Version Control with Git/Mercurial

# **Professional Experience**

#### Software Technology Consultant at Candriam (A New York Life Investments Company)

June 2024 - Present

Providing innovative and diversified investment solutions as a Senior Member of the IT Team at Candriam, a globally recognised asset management pioneer. In charge of kicking off Greenfield Projects, contributing to Legacy Projects too:

- <u>Crafting entirely from scratch:</u> single-handedly building multithreaded/multi-tasked background services for dynamic data synchronisation across different environments and databases. Advanced SQL query optimisation and customisation. Support for bulk copying, detecting & fulfilling dependencies, and exhaustive/partial schemas.
- <u>Cracking on with critical team projects:</u> Functional & Technical modernisation and migration of Subscriptions,
  Redemptions and Trading Tools. Primarily Web APIs serving Dashboards and Grids with CRUD functionalities.
   <u>Technologies:</u> C#, ASP.NET Core, Blazor, SQL Server, Hangfire, Azure DevOps (Release Pipelines and Artifacts)
   <u>Skills acquired:</u> Investment Solutions, Financial Asset Management, 80% Code Coverage (Unit Testing)

# **Software Engineer (Contractor)** at **BNP Paribas (Corporate & Investment Banking)**, *Paris (FRANCE)*November 2020 – May 2024

Crafting Electronic Trading Systems as part of an All-Star Team at BNP Paribas CIB, which is the Global Investment Banking Division of BNP Paribas, the largest Banking Group in the European Union. Working on a series of expanding projects as part of the Bank's major technological push to meet its aggressive growth goals on Global Markets. On a mission to help develop the future of Electronic Foreign Exchange Trading. Fully committed to Complete Success across the entire Software Development Lifecycle. Key responsibilities included:

- Contributing to Brexit Strategy & Operations through extensive collaboration with both London and Paris Teams
- Providing 3<sup>rd</sup> Level Specialist Technical Support for e-Trading Systems
- Developing a Suite of Forex/Derivative Trader Tools for Monitoring, Pricing and Execution:

MONITORING	Alert Monitor	<ul> <li>Filterable alerts of various types: new orders, STIR warnings, regulatory limits, etc.</li> <li>User configurable selection of alerts delivered on the desktop or via email</li> <li>Tracking and reminding about "Missed Alerts"</li> </ul>
	Trade Blotter	<ul> <li>Real-Time visual representation of deals, RFQs and rejected trades</li> <li>Highly customisable layouts, filters and alerts</li> <li>Dynamic statistics</li> </ul>
PRICING	Spot/Forward Pricer	<ul> <li>Visualisation and Control of Pricing Configuration for Spots and Forwards</li> <li>Spread and Skewing Management</li> </ul>
	Client Broker	<ul> <li>Facility to manage specific clients with pricing restrictions and overrides</li> <li>Auditing and Approval workflows for changes to Spot and Forward pricing</li> <li>Brokerage and Spread breakdown across currency pairs and volumes</li> </ul>
EXECUTION	Smart Executor	<ul> <li>Highly customisable tiles with configurable depth of book &amp; quick Buy/Sell amounts</li> <li>Bespoke trader keypad with hot-key accelerated execution, plus protection systems against accidental inputs and extreme price fluctuations</li> <li>Full visibility of working orders and fills, with rapid fills &amp; order aggression settings</li> <li>Aggregation of multiple price sources and market liquidity (for Spot &amp; NDF trades)</li> </ul>
	Algo Terminal	<ul> <li>Bespoke Algorithmic Trading strategies to capture price improvements, minimise market impact and reduce transaction costs</li> <li>Adaptive and Optimal Execution techniques with adjustable execution speed and high level of flexibility to pause/cancel/amend orders</li> <li>Dynamic blotter showing real-time fills, order details, a comprehensive execution breakdown and deal workflow management</li> <li>Configurable and detailed reporting at every stage of the execution cycle</li> </ul>

Portfolio Manage	• Features to submit and manage baskets/portfolios of Algorithmic Orders while
	following Optimal Execution Methodologies
	<ul> <li>Coordinated Strategy Optimisation within Portfolio, such as related Orders getting decrossed and netted off systematically at Preview Stage</li> </ul>
	Several Execution Modes and Options to control Execution and Strategy Parameters
	<ul> <li>Real-Time Status/Statistics/Reporting at both Portfolio and Order levels, as well as their suitable sets of Commands</li> </ul>

<u>Technologies:</u> C#.NET, WPF, XAML, Reactive Extensions, Protocol Buffers, Tibco Rendezvous, ElasticSearch Skills acquired: Forex Market, Trader Tools Design, Front Office Development, Controlling Complexity & Scalability

# **Software Engineer** at **Vanquis Bank, The Vanquis Banking Group**, London (**UNITED KINGDOM**) February 2019 – November 2020

Working for the Leading Bank in the exceptional credit market, helping people achieve their financial goals, helping put people on a path to a better every-day life. Providing E-Commerce solutions for various financial services, including Credit Cards, Loans and Bonds. Working in a highly agile environment within the Commercial Engineering Team. Known in the team as "The Bug Smasher". Awarded by Senior Management as the Top Performer of all of the IT Commercial Engineering Department. Had often been the only Software Engineer in charge of development and support for the major bank websites, including origincreditcard.co.uk, aquiscard.co.uk, chromecard.co.uk and vanquis.co.uk. Main accomplishments included:

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Massive set of	Home/landing pages, enquiry/application forms, web widgets
<b>Functional Improvements</b>	Affordability, calls to action, digital welcome calls
across the main screens	Affiliate journeys, referrals and APIs integration
Large number of	Image sliders, hero headers, typography, iconography, animations
<b>UI/UX Enhancements</b>	Page layout, responsiveness, scalability, accessibility
	Renovating both internal and customer facing screens
Delivering	Developed new Loans Products and migrating Websites into Azure Cloud
New Systems	Fully-featured Blog Platform with a focus on SEO & responsive navigation
	<ul> <li>Knowledge Base system for Frequently Asked Questions with Smart Search &amp; Rating abilities</li> </ul>
	Cookies Management mechanism: custom content for different user profiles.
	<ul> <li>Personalised decision screens showing time-sensitive content, with support for weekends &amp; bank holidays</li> </ul>
	Custom Breadcrumb Trail & Menu Navigation
	Integrating with external banking systems (including Open Banking Services)
Clearing bugs and Technical Debt	Writing and running functional A/B tests, unit tests, integration tests, acceptance tests and regression tests
throughout the bank systems.	Reporting and addressing Security/Vulnerability issues
	Supporting UAT and Live releases
Contributing as a proper	Working as part of a cross-functional team
Team Player	Close collaboration with Test Engineers, helping them write multi-threaded tests
	Helping teammates leverage CMS Templates & Content Management features
	Occasionally leading Sprint Meetings such as Retrospective Sessions

<u>Technologies:</u> C#, JavaScript, Umbraco CMS, jQuery, .NET Core, Selenium, SpecFlow, Terraform, YAML <u>Skills acquired:</u> Azure (Cloud Storage, Service Bus, Durable Functions, WebJobs), CI/CD, BDD, Test Automation

#### Software Engineer at URIS Group, Direct Group, Ardonagh Group, England (UNITED KINGDOM)

October 2017 - February 2019

Working for the biggest independent insurance broker in the UK, where Insurance and Innovation combine: integrating the latest technology with great customer service to provide end-to-end insurance solutions across a variety of sectors. Crafting Windows and Web solutions for business partners (such as Lloyds Bank, The AA and Towergate Insurance) and their customers. Supporting and enhancing internal software solutions. Full-Stack Development of Claims, Underwriting and Risk Management Systems. Operating within an agile development team of 10-to-15 professionals, including testers and business analysts. Nominated for the company Rewards and Recognition Awards. <a href="Technologies: ASP.NET/Desktop Apps">Technologies: ASP.NET/Desktop Apps</a>, Win/Web Services, EF, PowerShell, SQL Server, ETL (SSRS/SSIS) <a href="Skills acquired: project leadership">Skills acquired: project leadership in financial services, data protection and legal compliance in the finance industry.

#### **Software Developer** at **Webigence**, *London* (*UNITED KINGDOM*)

*May 2016 – September 2017* 

At Webigence.com, .NET development specialists and Microsoft Certified Gold Partner. Building and supporting large applications for established businesses, predominately with complicated technical requirements, within a team of 5 to 10 engineers. Major clients included no1lounge.com, y.co and hugofox.com. Key contributions included:

- Web applications and APIs: bespoke web portals, content management systems and E-Commerce platforms
- Mobile applications: for Android and iOS using Xamarin Forms, Custom Renderers, MVVM Architecture
- Windows services: advanced multithreaded Web scraping tools

<u>Technologies:</u> ASP.NET Core, Xamarin, Angular, SQLite, Entity Framework, NoSQL (MongoDB, Azure DocumentDB) <u>Skills acquired:</u> detailed work reporting (billing clients by the hour using timesheets), collaborating with remote teams, code reviews, mentoring juniors, Dependency Injection, Inversion of Control, Repository and Unit of Work patterns.

#### **Software Developer** at **Golfbreaks**, Windsor (UNITED KINGDOM)

March 2012 – May 2016

Worked with the various departments to determine requirements and implementing them accordingly. Investigated and fixed issues throughout all systems as they arose. Development of golfbreaks.com, teeofftimes.co.uk, bookaspa.com and other core systems within a team of 5-to-12 persons. Individual projects completed include:

- <u>Correspondence system for communication with customers and suppliers</u>: to generate and send PDF/HTML outputs documents such as quote options, payment and booking confirmations, balance reminders, vouchers, invoices and loyalty programme letters (invitations, registration confirmation, password reminder, etc.). Key features include previewing, branding, e-mail tracking, integration with websites and internal systems, administration interface.
- <u>Image management system</u>: key features include image uploading, browsing, editing, SEO, moving, sorting, displaying/hiding. Integration with websites and internal systems. Interacting with various image APIs.
- Competitor analysis tool: parsing competitor websites with Html Agility Pack, storing and comparing prices.
- Welcome screen for the reception desk: GUI tool to schedule, manage and list daily visitors information.
- Banner builder: WPF tool for designing ad banners by inserting product details/offers, dynamic prices and images.
- Recruitment section of the main website: customisable recruitment form, integration with Salesforce API.
- <u>Various internal automation tools</u>: generating promotion codes, detecting invalid pages, transferring translated content, importing/exporting website data, charting system errors and notifications.
- Graphics works: Web Design, maintenance pages, video editing, advert animations.

Technologies: C#, ASP.NET MVC, jQuery, WPF, XAML, LINQ to SQL, XSLT, JSON, Web Services.

Skills acquired: E-Commerce, Taking Responsibility, Unit Testing, TFS Version Control, Documentation, Agile Spirit.

#### Project Director at Evasium, London (UNITED KINGDOM)

December 2010 – Present

Software Architect: both an engineer and a manager. Coding on a daily basis, working on a series of side projects, many of them are available for demonstration at Necemon.com. Latest prototypes and demos are available upon request. <a href="Skills acquired:">Skills acquired:</a> self-education, perspicacity, indefatigability, team management (3-to-10 persons), marketing strategy.

#### Web Developer (Trainee) at Pingar, Swansea (UNITED KINGDOM)

 $November\ 2010-August\ 2011$ 

Industrial class project: built an ASP.NET MVC Analytics Engine, leveraging the Facebook API and the Pingar systems. <u>Skills acquired:</u> identifying issues, gathering relevant data, using available information and insights to solve problems.

#### IT Officer at The Business And Economics Society, Swansea University (UNITED KINGDOM)

October 2010 – June 2011

Managed the society website and data, mostly related to users, sales and events.

Skills acquired: User Membership Management, flexibility (keeping up with the society and website requirements).

#### Web Developer (Intern) at General Electric (GE Energy), Hyderabad (INDIA)

June 2010 - September 2010

Creation of data tables and User Friendly ASP.NET Web Interfaces for tracking, reporting and searching order details. <u>Skills acquired:</u> Refactoring, GE Code of Conduct at Work (Highest Integrity & Commitment), effectively managing time to meet deadlines.

#### Webmaster at the Association of Christian Christites, Christ University, Bangalore (INDIA)

July 2007 - September 2009

Website design and development. Also worked on various publications such as posters, magazines and newsletters, as a member of a 4-to-6 persons group.

Skills acquired: HTML, CSS, Web Design, Graphic Design, Accountability, Teamwork.

### **Finance Certifications**

October 2023	CISI Professional Programme in Capital Markets
October 2023	CISI Official Certification in <b>Financial Regulation</b> (Ofqual Regulated Qualification) Core Modules: Regulatory Environment, Financial Legislation, Standards for Business Conduct
June 2023	CISI Professional Certification in <b>Financial Markets</b> (RQF Level 6, EQF Level 6) Core Modules: Equities, Bonds, Derivatives, Forex, Commodities, Financial Maths, Economics
October 2021	CISI Qualifying Certification in <b>Financial Securities</b> (RQF Level 3, EQF Level 4) Core Modules: Asset Classes, Primary/Secondary Markets, Financial Ratios, Corporate Actions
October 2019	CISI Fundamental Certification in Ethics and Integrity Matters (as a CISI Affiliate Member)

# **Technology Certifications**

September 2016	MCSD: Microsoft Certified Solution Developer - App Developer
February 2016	IKM Score: 92% (C# Programming Proficiency)
April 2015	MCSD: Microsoft Certified Solution Developer - Web Developer MS: Microsoft Specialist (Web Programming)
July 2013	MCPD: Microsoft Certified Professional Developer MCTS: Web Applications, Data Access, Service Communication Applications
January 2011	MCPD: Designing and Developing ASP.NET Applications MCTS: Technology Specialist for .NET Application Development.
November 2008	MCPD: Microsoft Certified Professional Developer - Web Developer MCTS: Microsoft Certified Technology Specialist - Web Applications (C#)

# **Education**

#### Swansea University, Swansea (UNITED KINGDOM)

*September 2009 – June 2011* 

- Master of Engineering (MEng, Computing, RQF Level 7, EQF Level 7): Upper Class
- <u>Core Modules:</u> Computer Graphics, Data Visualisation, Marketing, Virtual Life, Building Reliable Web Applications, Mobile & Internet Computing, Artificial Intelligence, Interaction Technologies, Cryptography & IT Security.

#### Christ University, Bangalore (INDIA)

*June 2007 – September 2009* 

- Bachelor of Computer Applications : First Class
- Transferred to Swansea University during fifth semester.
- <u>Core Modules:</u> Mathematics, Statistics, Data Structures, C/C++/Java/VB.NET Programming, Technical English, Corporate Finance, Software Engineering, Databases Management.

#### NIIT (National Institute of Information Technology), Bangalore, (INDIA)

September 2006 – September 2009

- NIIT Diploma in Software Engineering: Ranked as "Good"
- <u>Core Modules:</u> Object Oriented Programming, .NET Framework, Graphical User Interfaces, Project Management, SQL Database Management, UML Design, Web Application Technologies, Distributed Application Development.

#### **Additional Information**

- Utilised effectively other programming languages, essentially Java, C, C++, Python and VB.NET.
- Exposure to many other technologies, including but not limited to PowerShell, SignalR, Roslyn, Orleans & FASTER.
- Has a methodical, structured and diligent approach to getting things done with a focus on Customer Empathy.
- Comfortable with a high degree of decision making responsibility and accountability.
- Author of numerous Essays and Articles on Technology and Strategy: NeceMoon.com.
- Alumni Member of the Chartered Institute for Securities and Investment (CISI).
- Fluent in English and French. B1 Level in German.



















