

**SUMMARY**

Mark is a seasoned leader offering adept people management and profound technical leadership, with a particular focus on medical software development. With over 20 years of experience, Mark has successfully delivered diverse projects, spanning from medical robotics to Software as a Medical Device (SaMD). His extensive hands-on development experience adds a unique dimension to projects, consistently leading to successful project delivery.

Possessing excellent interpersonal skills, Mark has a rich background in both business and technical consultancy. He has steered numerous projects through the entire development lifecycle, showcasing versatility from responding to RFPs to guiding clients in executing their business strategy, culminating in the delivery of full-fledged products. Mark seamlessly combines the ability to collaborate with clients and comprehend their needs with a high level of technical prowess and knowledge.

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**AREAS OF EXPERTISE****Leadership, Quality & Thought-Leadership**

- Showcased **Leadership** capabilities by spearheading the recruitment and growth of Software Engineering and Delivery teams across various organisations.
- **Extensive Management Experience** in owning and managing the delivery of complex medical projects and/or portfolio of projects within regulatory-compliance and budget limitation (£6MM).
- **Good Communication & Negotiation Skills** with a Team player attitude combined with effective, real-world risk management approach and ability to manage project stress, aggressive timelines, workloads, scope & change management.
- **Significant Stakeholder Management Experience** in building and managing relationships with key stakeholders-internal and external with the ability to influence & motivate team members to good effect with drive and enthusiasm.
- **Experienced** in running programs of work in **Agile/SCRUM** with development teams, as well as more traditional development programs, but recognises that the best work comes from teamwork, breaking silos, with business agility as the centre of transformation programs, and understands that achieving that is as much a people coaching role as a technology process role.
- **Financial Management Experience** with accountability for revenue recognition, SOW management, profitability analysis, staffing invoicing requirements.
- **Solid Line Management Skills**, demonstrated proficiency in hiring, leading and mentoring less experienced engineers to maximize levels of productivity.

**Technical Expertise**

- Extensive experience in **the full life cycle of medical software development products**, including developing requirements, system architecture (to include safety-critical software architecture), hazards analysis, FMEA, test protocols.
- Consulted with clients to identify key project milestones, define project scope, developed project plans and **product roadmaps**, provided leadership to internal teams on projects and facilitate **issue resolution**.
- Hands on experience in leading and developing **cross-platform products** and applications; creating a common communication protocol language between multiple devices.
- Expertise in real-time algorithm development, through from simulations to production level code on an embedded devices.

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**PROFESSIONAL EXPERIENCE**

<b>Closed Loop Medicine – Director, Medical Devices (SaMD)</b>	<b>04/2022 to Present</b>
<ul style="list-style-type: none"> <li>Directly manages the Software Engineering and Delivery team responsible for building, deploying, and maintaining SaMD products.</li> <li>Responsible for the end-to-end development and delivery lifecycle for the Digital component of CLM drug-digital combination products, with a focus on Software-as-a-Medical-Device (SaMD)</li> </ul>	
<b>BrightInsight – Director, Program Management</b>	<b>07/2020 to 04/2022</b>
<ul style="list-style-type: none"> <li>Responsible for the delivery and launch of an SaMD/GxP compliant ophthalmic clinical trials platform to a top tier biopharma.</li> </ul>	
<b>Sagentia – Software Group Leader</b>	<b>04/2010 to 06/2020</b>
<ul style="list-style-type: none"> <li>Responsible for the incubation of a new software group in the London office, from the recruitment of key personnel, the sale and operation of client projects to the 'day to day' line management of the group directing the development and training of the team.</li> <li>Programme Manager for the development of an infusion pump management system (£6MM), This programme involved the simultaneous development of 8 products across 5 different organisations in 3 different continents.</li> <li>Programme Manager for the development of a Smart Metering Cloud Service Platform. This programme involved four simultaneous large-scale, interrelated projects, operated by personnel from three other organisations (£3MM)</li> <li>Project manager and lead for the development of a multi-axial invasive surgical robot following the IEC 62304 medical device software lifecycle process. (\$2MM)</li> <li>Software project manager for the development of a multiplatform pharmaceutical labelling system. (\$1.5MM)</li> <li>Project manager and software lead for the development of a Bluetooth low energy smart wellbeing device (\$0.5MM)</li> </ul>	
<b>Airvana (formerly known as 3 Way Networks) - Contractor</b>	<b>09/2006 to 03/2008</b>
Development of an HSDPA Pico-cell product, through full life-cycle: Feasibility study, board design, software system architecture, HSDPA design implementation, Integration to existing hardware for higher-layer 3G signal processing	
<b>Custom Golf Studio - Director</b>	<b>10/2006 to 10/2011</b>
<p>Started a Custom Golf Club Fitting studio, using radar technology to track ball-flight.</p> <p>Skills developed: Customer Management, Time Management, Sourcing of raw materials, supplier relations, Selling ( to individuals and businesses), Budgeting and Costing, Accounting for a Limited Company, VAT returns</p>	
<b>Aeroflex (formerly known as Ubinetics) - Algorithms Engineer</b>	<b>09/2004 to 09/2006</b>
Design and implementation lead on telecommunications algorithms projects	
<b>IP Access Ltd - DSP Software Engineer</b>	<b>09/2003 to 09/2004</b>
Responsible for automated build systems on a multi-processor product. Designed and implemented calibration tools for testing of the physical layer of a GSM base station. Responsible for driver development on a voice baseband codec.	
<b>Akubio Ltd - Principal DSP Software Engineer</b>	<b>03/2003 to 09/2003</b>
A start-up environment. Responsible for creating good software development practices in the company. Developed algorithms based on wavelets to detect bond breakages. Created automated tools for analysing vast amounts of data.	
<b>PA Consulting Group - Consultant, Wireless Technology Practice</b>	<b>01/2001 – 02/2003</b>
<p>Worked on a combination of in-house projects and client projects. Involved in requirements definition through to implementation and test. Examples include:</p> <ul style="list-style-type: none"> <li>Software developer on the world's first all-software WCDMA 3g baseband system</li> </ul>	

- Lead developer in the design and development of a CDMA2000 air interface demonstrator;

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## EDUCATION

**University of Bath**

**PhD**

A Non-Intrusive Power System Arcing Fault Location System Utilising VLF Radiated Electromagnetic Energy

**BEng (1<sup>st</sup> Class Honours)**

Electrical & Electronic Engineering.