Guy's and St Thomas' NHS
NHS Foundation Trust

PERSON SPECIFICATION

POST: Senior Clinical Scientist in Artificial Intelligence (Band 8A)

DEPARTMENT: Medical Physics

Requirements

	ESSENTIAL	A/I/T*	DESIRABLE	A/I/T*
Qualifications/ Education	Good (1st or Upper 2nd class) Honours degree in a relevant subject Relevant MSc or equivalent	A A A	Completion of Scientist Training Programme in a relevant discipline, or equivalent Relevant PhD	A A
Professional/ Statutory Registration	State registration as a Clinical Scientist (gained or achievable within an acceptable timeframe)	A/I	Professional registration or chartered membership in engineering or computing – IET, IPEM, FCI, BCS, etc	
Previous experience	Highly developed specialist knowledge across the full range of working procedures and practices in clinical scientific computing, building on theoretical knowledge and practical experience. Specialist training and practical experience with a wide range of clinical scientific	A/I A/I A/I A/I	Previous research experience	A

	computing systems and software			
Skills/Knowledge/ Ability	Advanced knowledge of problems arising from system errors, equipment failure and clinical factors Advanced specialist knowledge of techniques and clinical applications Extensive experience of software engineering and the software development life-cycle, including issue tracking, testing, documentation, version control and continuous integration. Able to prioritise and manage own work Able to exercise own initiative when dealing with issues within own specialist area of competence and within broader areas of clinical scientific computing In depth understanding of relevant legislation, national standards,	I I I I	In-depth knowledge of several high-level languages used in data science, such as Python, R, Julia, Java, or C++, and ability to rapidly acquire knowledge of new languages and platforms. Understanding of distributed software applications. Up to date with new approaches in software development Demonstrable experience with PostgreSQL or other modern SQL platforms Experience with HL7 messaging or other healthcare enterprise integration standards Knowledge of and commitment to software development best practise	I I

	professional and other guidelines Able to use Excel, Word, Access etc to set up documents and spreadsheets and extract information.			
Physical Requirements	Highly developed physical accuracy and dexterity, for making precision measurements and adjustments on equipment Use of fine tools for equipment adjustment Able to lift medium/heavy weights Able to concentrate frequently when subject to unpredictable working patterns Able to concentrate for prolonged periods [eg debugging software] Able to deal with occasional distressing circumstances [work occasionally involves contact with patients]	I I I I I I		
Additional Information	Able to communicate highly complex information	I	Experience of organising and delivering teaching and training to a	

	[eg postgraduate level physics material to other professional groups] Able to present scientific papers at national and international conferences Able to train groups of other professional staff Able to develop and deliver teaching and training on complex subjects Good negotiation skills Able to deal with complex and unpredictable situations	I I I I I I	multidisciplinary audience.	

A=application
I=interview
T=Test/ assessment centre

It must be stated whether these requirements are **ESSENTIAL** or **DESIRABLE** for the post. This can be clearly understood by the potential candidate if it is done in the form of a chart.

Add initials and date of preparation

SK 21st November 2019