



## JOB DESCRIPTION

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**Job Title: Head of Software Development**

**Reports to: Executive Director**

**Salary Band: TBA**

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### SUMMARY OF THE ROLE

The Head of Software Development (HoSD) is a leadership role accountable for the successful delivery of software and IT support infrastructure for the CCDC. Managing a team of developers and IT specialists, the HoSD will work closely with the Executive Director, the Head of Science, the Head of Database and other members of the Senior Leadership Management Team (SLMT) in order to deliver software and IT services that meet user needs and that is in keeping with our charitable aims in the service of the scientific community and for public benefit. The HoSD will be accountable for the creation and delivery of the strategic, software and IT architecture vision and leadership and all aspects of the development of the software.

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### MAIN DUTIES AND RESPONSIBILITIES

#### *Main responsibilities*

- Develop and deliver a strategic technological vision and direction for the CCDC;
- Lead and manage the Software Development and IT teams to deliver software, infrastructure and architecture that meets the needs of users;
- Ensure delivery consistent with Agile processes across the team;
- Work effectively with Product Managers and Product Owners to ensure delivery against agreed priorities;
- Implement mechanisms to monitor, manage and provide progress on all software development activities;
- Accountable for the on time and to quality delivery of software development projects;
- Responsible for the maintenance and development of internal and external IT support systems;
- Create, implement and maintain a continuous improvement plan for software development and IT infrastructure;
- Working closely with the Product Managers with the aim of meeting current and future user needs;



- In conjunction with the Systems Manager, define and maintain the IT technology strategy and infrastructure plan;
- Research the external environment, and where appropriate identify and recommend external partners for the delivery of best in class technologies suitable for CCDC applications;
- Reviewing and applying said best practices to establish architecture and frameworks consistent with and supportive of the Product Strategy;
- Identifying and implementing technology trends that will be able to support the future success of the business;
- Articulating to colleagues, Trustees and user communities, the company's technological vision, opportunities, and challenges as agreed with the Head of Science and Product Managers;
- Collaborating with the appropriate functions and users to evaluate and identify technology platforms for delivering the company's products and internal services;
- Understanding the use cases (and/or user stories) in order to oversee the design of the architecture for the products to be built;
- Ensuring that technology standards and best practices are maintained across the organization;
- To drive consistent standards and approaches throughout the development teams;
- Responsible for his/her own work planning against objectives set in agreement with the Executive Director.

#### *Communication and information*

- Report to and meet with the Executive Director at a minimum of once per month;
- Communicate and ensure engagement of CCDC technology strategies internally and within the CCDC user community;
- As necessary, participate in and co-ordinate the software development activities of CCDC in external consortia and expert groups in support of the company's charitable aims;
- Promote the company and its charitable aims within the industrial and academic communities;
- Ensure effective internal communications both within the software development team and across the organisation.

#### *Financial*

- Accountable and responsible for effective financial management, planning and monitoring of the Software Development and IT teams;
- Provide monthly information to enable the creation of financial results and forecasts for the above teams.

#### *Staffing, Management and Resources*

- Ensure that the skills and experience of Software Development and IT teams are consistent with its scientific, technological and business needs for providing quality in present and future services;
- Encourage software and IT staff to represent CCDC at conferences and meetings to continuously grow the reputation of the charity;



- Establish clear organisational structures and succession plans aligned with appropriate responsibilities, accountabilities and personal development for all Software Development and IT staff in line with any anticipated growth;
- Provide support for all staff in keeping with the CCDC Values.

#### *Policies and Procedures*

- Comply with all relevant policies and procedures
- Complete all documents required by the company policies and procedures

#### *Other*

- Undertake additional tasks and responsibilities as may be reasonably expected of the role and as necessary in order to achieve the objectives of the Software and IT teams and CCDC goals.



## PERSON SPECIFICATION

### Education, Skills & Knowledge

Educated to degree level or equivalent	Essential
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PhD in the field of computer science or equivalent experience	Desirable
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Project Management qualifications	Desirable
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A knowledge of Chemistry and/or crystallography	Desirable
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Strong understanding of the Agile software development cycle	Essential
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Familiar with more than one software development methodology	Essential
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Excellent written and oral communication skills	Essential
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Outstanding interpersonal skills	Essential
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An understanding of databases (including relational databases)	Essential
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Knowledge of web services and standards	Desirable
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An understanding of the handling of large data sources	Desirable
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### Abilities

Ability to envision and deliver software solutions that meet user needs and/or solve business problems	Essential
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Able to design and architect technically sophisticated solutions to meet challenging user requirements	Essential
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Ability to set and manage priorities judiciously	Essential
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Ability to articulate and gain engagement for ideas to both technical and non-technical audiences	Essential
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Ability to motivate in a team-oriented, collaborative environment	Essential
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## Experience

Demonstrable and substantial experience in leading and managing teams of software developers	Essential
Experience of successfully designing and developing sophisticated software products deployed in a variety of environments	Essential
Hands-on experience of coding using more than one recognised industry standard language (e.g. C++; .Net, C#)	Essential
Working in an Agile environment	Essential
Leading teams in working in an Agile environment	Essential
Performance and line management of highly skilled teams	Essential
Experience of successfully delivering into the market sophisticated software product releases deployed into a variety of environments	Essential

## Personal Characteristics

Self-Motivated and able to work independently	Essential
Attention to detail	Essential
Collaborative	Essential
Team player	Essential
Supportive	Essential
Passionate	Essential
Professional	Essential
Accountable	Essential