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| POSITION DETAILS  |
| Program: |
| Software & Computational Systems |
| Proposed Group |
| Distributed Systems Security |
| Functional Area |
| Research Scientist |
| Job Title |
| Senior Principal Research Scientist in CyberSecurity |
| Positions Available |
| 1 |
| Tenure |
| Indefinite |
| Specified Term |
| No |
| Tenure |
| Full-time |
| Part-Time |
| No |
| What is the CSOF Level of the Role |
| CSOF 8 |
| Location |
| Marsfield, NSW; Clayton, Melbourne |
| % Client Focus – Internal |
| 50% |
| % Client Focus – External |
| 50% |
| Who is the Line Manager for this position |
| Distributed Systems Security group leader |
| Is this a Line Manager role |
| Yes |
| How many direct reports will there be? |
| TBD |
| How many people are in their team |
| TBD |
| ROLE OVERVIEW |
| Describe the purpose of the role in 500 words or less |
| The Senior Principal Research Scientist is a professorial position and will work in the area of “system security” within Distributed Systems Security group. He/she leads innovative, impactful research of strategic importance to CSIRO Data61’s cybersecurity research focus areas: Software Security, Human Centric Security and Cybersecurity in Emerging Technologies like AI/ML, IoT and Quantum, with the possibility of novel and important scientific outcomes. He/she presents the findings in appropriate publications and at conferences.This role will contribute to Data61’s vision of driving the development and adoption of Cybersecurity solutions in Australia. The role leads and delivers research collaborations with the vision of protecting society, government and industry from future attacks. The role will develop security primitives, protocols and methods that ensure organisations and people stay secure from sophisticated cyber-attacks. The Senior Principal Research Scientist will collaborate and show leadership in building a new research area and developing a stream of research and development that contributes to high-quality articles acceptable to high-rank conferences (Crypto, Eurocrypt, IEEE S&P, ACM CCS, NDSS, Usenix Security, ESORICS, ASIA CCS or similar) and high impact journals (IEEE Transactions on Information Forensics and Security, IEEE Transactions on Dependable and Secure Computing, or similar). In addition, he/she is expected to lead client-oriented projects with impact, which includes commercialisation and utilisation of developed IP.  |
| DUTIES AND KEY RESULTS |
| Key accountabilities |
| 1. Take a leadership role to establish a new research area and deliver high-quality research and research projects in cybersecurity.
2. Work closely with other business units within CSIRO understanding their underlying needs.
3. Anticipate industry and/or community needs and market direction through client liaison/networking and identify and adapt quickly to changes.
4. Within broad guidelines, use professional expertise, knowledge of other disciplines and research experience/achievement to formulate, develop and complete an approved research program with general direction as to the aims of their activities.
5. Communicate research results to clients and the scientific community through oral and written reports, which may include the preparation of documents for patent applications.
6. Provide advice to policymakers and inform and transfer knowledge to non-scientific audiences.
7. Lead, mentor and supervise staff to ensure that experiments are established in accordance with the research design and are completed within the agreed timeframes and budget.
8. Undertake feasibility studies, demonstrating a considerable degree of originality, creativity and innovation in solving problems and introducing new directions and approaches.
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| SELECTION CRITERIA |
| Pre-requisites: Education/Qualifications |
| A doctorate in a relevant discipline area, such as Computer Science, Data Sciences, Cyber Security, Information Technology or Software Engineering. To be eligible for this role you must have about 10 years (or part time equivalent) of research experience. |
| Essential criteria: Key Knowledge/ Experience |
| 1. High-level experience in forming a new research area, leading and conducting research activities in information security.
2. High-level experience in leading and conducting high-quality research, development and implementation in quantum security with publications in the top tier security conferences Crypto, Eurocrypt, IEEE S&P, ACM CCS, NDSS, Usenix Security, or similar level conferences in other domains.
3. High-level experience in working in a multi-disciplinary environment, applying research outcomes in solving practical/industry problems, preferably in the area of system security.
4. Experience to lead and work effectively in a research team and provide supervision and mentoring to junior researchers.
5. High level of written and oral communication skills with the ability to represent the research team effectively internally and externally, including the presentation of research outcomes at national and international conferences.
6. A well-established record of science innovation and creativity, including the ability & willingness to incorporate novel ideas and approaches into scientific investigations.
7. A history of professional and respectful behaviours and attitudes in a collaborative environment.
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| Desirable Criteria |
| 1. Experience in system security.
2. High-level experience in developing security, and software solutions for distributed systems architecture and platforms.
3. High-level experience in PhD student supervision and established research collaborations.
4. High-level experience and leadership skills in proposal development, innovation and research project delivery with impact.
5. Proven ability to remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.
6. The ability to work effectively as part of a multi-disciplinary, potentially regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.
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| Special Requirements |
| Medical Exam (No), Security clearance (Unsure), Other (Yes) |
| If Other special requirements selected |
| The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits. |
| Additional Notes |
| None |