

**NOTES**

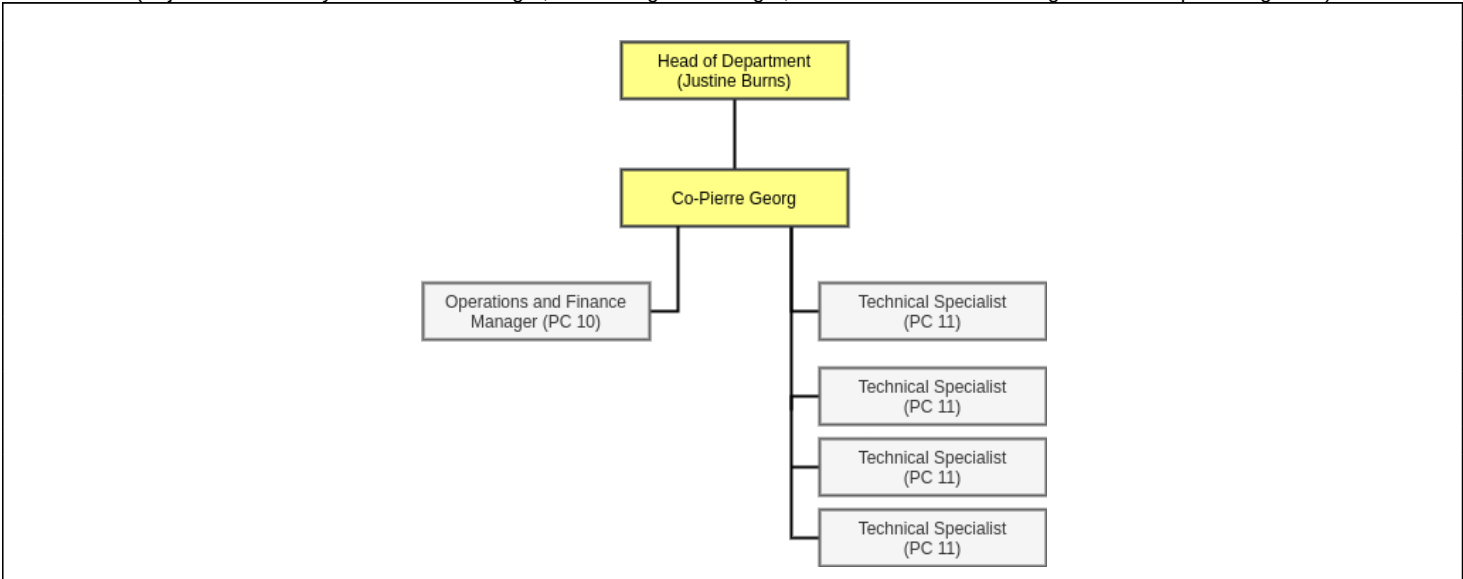
- Forms must be downloaded from the UCT website: <http://forms.uct.ac.za/forms.htm>
- This form serves as a template for the writing of position descriptions.
- A copy of this form is kept by the line manager and the position holder.

**POSITION DETAILS**

Position title	Technical Specialist		
Job title (HR Practitioner to provide)			
Position grade (if known)	PC 11	Date last graded (if known)	
Academic faculty / PASS department	Commerce		
Academic department / PASS unit	School of Economics		
Division / section			
Date of compilation	July 2021		

**ORGANOGRAM**

(Adjust as necessary. Include line manager, line manager's manager, all subordinates and colleagues. Include position grades)



## PURPOSE

The main purpose of this position is:

- To support the activities of the fintech innovation hub by developing and maintaining a broad range of financial- and privacy technology, specifically in the area of distributed ledger technologies and trusted execution environments
- To support the overall software development strategy of the fintech innovation hub as a full-stack or front-end developer
- Responsible for implementing and overseeing an agile development strategy for the development team of the fintech innovation hub
- Ensuring quality control for the development team of the fintech innovation hub

**CONTENT**

Key performance areas		% of time spent	Inputs (Responsibilities / activities / processes/ methods used)	Outputs (Expected results)
1	Develop infrastructure and services through project work	60%	<ul style="list-style-type: none"> <li>• Lead high-risk projects with society-wide impact                             <ul style="list-style-type: none"> <li>o Plan, direct, and coordinate activities of designated project to ensure that goals or objectives of project are accomplished within prescribed time frame and funding parameters</li> <li>o Establish work plan and staffing for each phase of project, and arrange for recruitment or assignment of project personnel</li> <li>o Confer with project staff to outline work plan, to assign duties, to provide technical advice and to resolve problems</li> <li>o Coordinate activities of project personnel to ensure project progresses on schedule and within prescribed budget</li> <li>o Ensure documentation and sustainability</li> </ul> </li> <li>• Develop operations                             <ul style="list-style-type: none"> <li>o Recommend improvements to enhance efficiency</li> <li>o Test and evaluate new software, hardware and operating procedures</li> <li>o Develop and document standard operating procedures and security policies, in consultation with peers and Team Leader</li> </ul> </li> <li>• Develop technical strategies, as requested by management                             <ul style="list-style-type: none"> <li>o Contribute to the development of technical strategies, as requested by management</li> <li>o Recommend the implementation of newer technologies in order to preserve high service levels</li> <li>o Test and evaluate new services and technologies</li> </ul> </li> <li>• Continual learning                             <ul style="list-style-type: none"> <li>o Keep abreast of new and emerging information technologies and industry trends in ICT by reading widely</li> <li>o Master new technical and business knowledge</li> <li>o Pursue self-development and engage in activities that promote learning and growth</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Project goals and objectives are accomplished.</li> <li>• Work plans and staffing for each phase of a project have been established.</li> <li>• Project personnel have been recruited and/or assigned.</li> <li>• Project staff have been briefed about the work plan, and assigned duties.</li> <li>• Project progress has been kept to schedule and is within its prescribed budget.</li>   <li>• Recommendations are made with pro's and con's highlighted</li> <li>• Test results are documented and stated in context including hardware and operational procedure impact</li> <li>• Stands operation procedure and policies are developed and submitted for approval and share with all relevant parties</li>   <li>• Documented strategies are circulated for comment and submitted</li> <li>• Recommendation and testing results of new technologies are documented and submitted listing the pro's and con's including the technical, financial and operational procedure impact</li>   <li>• Be knowledgeable for product and emerging technologies relevant to the specific area of work and be able to discuss it with peers</li> <li>• Participate in training initiatives</li> <li>• Demonstrate the ability to translate new technical and business knowledge to operational challenges, change and innovation</li> </ul>
2	Design, maintain and manage complete systems	25%	<ul style="list-style-type: none"> <li>• Design, maintain and manage complete systems                             <ul style="list-style-type: none"> <li>o Plan and design systems architecture</li> <li>o Plan and schedule the installation of new or modified hardware, operating systems and/or applications software</li> <li>o Manage system resources including performance, capacity, availability, serviceability, and recoverability</li> <li>o Implement security procedures and tools</li> <li>o Ensure systems availability, functionality, integrity, and efficiency</li> <li>o Rigorously apply information security/information</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Produce system architecture documentation in line with UCT architecture strategy, IT best practice and product specific requirements</li> <li>• Fully maintained and relevantly patched environment</li> <li>• Systems are configured to perform optimally, secure with confirmed backup and recovery</li> <li>• System documentation is available to all team members</li> </ul>

			<p>assurance policies, principles, and practices in the delivery of services</p> <ul style="list-style-type: none"> <li>o Analyse usage and performance statistics</li> <li>o Analyse system requirements in response to business requirements, risks and costs</li> <li>o Set and document technical standards, in consultation with peers and Team Leader</li> </ul>	
3	Provide technical leadership	15%	<ul style="list-style-type: none"> <li>• Document and communicate <ul style="list-style-type: none"> <li>o Use advanced technical writing skills to document complex systems</li> <li>o Keep team informed about developments</li> <li>o Inform the Team Leader of risks and important developments.</li> <li>o Propose clear action plans.</li> <li>o Write strategic technical recommendations</li> <li>o Liase with line managers and staff</li> <li>o Keep stakeholders informed of developments and problems that affect them</li> <li>o Log events and changes using the change control system</li> <li>o Communicate effectively via printed material on the telephone, in person and over electronic services</li> </ul> </li> <li>• Coach and mentor colleagues <ul style="list-style-type: none"> <li>o Develop and provide expert technical training, technical coaching and mentoring to colleagues</li> <li>o Consistently develop and sustain cooperative working relationships</li> <li>o Manage and resolve conflicts and disagreements in a positive and constructive manner to minimize negative impact</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• All communication is clear, appropriately comprehensive and of high quality</li> <li>• Team members should at all times be aware of new developments or changes and should be consulted for comment</li> <li>• Information and knowledge should be shared to all team members.</li> </ul>

### MINIMUM REQUIREMENTS

Minimum qualifications	<ul style="list-style-type: none"> <li>Relevant qualification at NQF level 7</li> <li>Relevant technology certifications and/or a qualification at NQF 8 would be advantageous</li> </ul>			
Minimum experience (type and years)	<ul style="list-style-type: none"> <li>At least one year of experience with relevant technologies</li> </ul>			
Skills	<ul style="list-style-type: none"> <li>Relevant technical competencies, in particular full-stack or front-end development</li> <li>Communication skills, verbal and written</li> <li>Analytical thinking and problem solving</li> <li>Time management</li> <li>Ability to work as part of a team</li> <li>Problem solving ability</li> <li>Demonstrated commitment to excellence</li> </ul>			
Knowledge	<ul style="list-style-type: none"> <li>Operating system knowledge at advanced administration level: Linux / Windows / OSX</li> <li>Decentralized technologies, including distributed ledgers, web3</li> </ul>			
Professional registration or license requirements	Not applicable			
Other requirements				
Competencies (Refer to <a href="#">UCT Competency Framework</a> )	Competence	Level	Competence	Level
	Analytical thinking / problem solving	2	Resource management	2
	Building relationships	1	People management	1
	Communication	2	Decision-making / judgement	2
	Risk taking	1	Creativity and innovation	2
	University awareness	2	Professional knowledge and skill	3
	Research Support skills	1	Conceptual thinking	2

### SCOPE OF RESPONSIBILITY

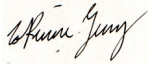
Functions responsible for	As assigned by line manager
Amount and kind of supervision received	The required supervision should be limited to Project Program Management, operational progress, high level prioritization and confirmation of strategic and policy alignment
Amount and kind of supervision exercised	Supervision of technology solutions developed by the fintech innovation hub with the purpose of coordinating and managing their work effort and verifying their work product
Decisions which can be made	Operational decisions for which standard process and procedure is in place and prior agreement or assignment was established
Decisions which must be referred	Contractual, financial architectural, risk, resource allocation and changes not catered for in pre-approved process, architecture/project scope definitions and data/information dissemination or sharing. (including to internal UCT/ICTS resources)

### CONTACTS AND RELATIONSHIPS

Internal to UCT	Fintech innovation hub members and associates, School of Economics, School of IT, ICTS
External to UCT	Algorand Foundation, fintech innovation ecosystem in South Africa and beyond, South African Reserve Bank

### AGREED BY

	PRINT NAME	SIGNATURE	CONTACT NO.	DATE
Position Holder				

Line Manager	Co-Pierre Georg			
HOD	Justine Burns			