



Pacific
Community

Communauté
du Pacifique

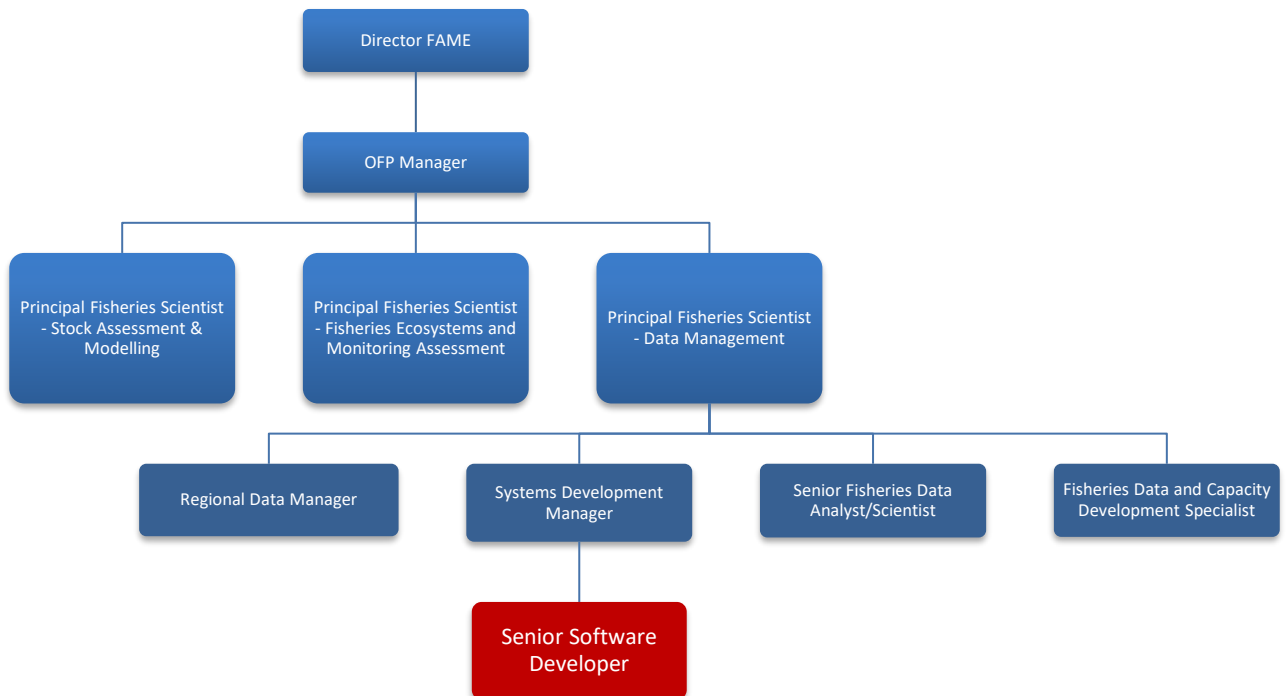
JOB DESCRIPTION

Job Title:	Senior Software Developer
Division and Section:	FAME, Data Management Section of the Oceanic Fisheries Programme
Location:	SPC Headquarters, Noumea
Reporting to:	Systems Development Manager
Number of Direct Reports:	0
Purpose of Role:	<p>This position exists to:</p> <ul style="list-style-type: none">• Undertake software development within the Oceanic Fisheries Programme (OFP) Section at the senior level• Design, develop and implement fisheries information systems and database management tools for member countries, including web services, web and mobile applications, and data workflows.• Collaborate with internal and regional stakeholders to understand and implement systems development solutions
Date:	December 2024

Organisation Context and Organisation Chart:

The Pacific Community (SPC) is the principal scientific and technical organisation in the Pacific region, supporting development since 1947. We are an international development organisation owned and governed by our 27 country and territory members. In pursuit of sustainable development to benefit Pacific people, our organisation works across more than 25 sectors. We are known for our knowledge and innovation in such areas as fisheries science, public health, geoscience, and conservation of plant genetic resources for food and agriculture.

The Division of Fisheries, Aquaculture and Marine Ecosystems (FAME) has been providing scientific and technical expertise to support fisheries management and sustainable development in the Pacific for over 60 years. The goal of the division is that the fisheries resources of the Pacific region are sustainably managed for economic growth, food security and environmental conservation. In pursuit of this goal, SPC FAME provides scientific analyses and management advice to PICTs and regional agencies to support the sustainable management of oceanic and coastal fisheries resources.



Key Result Areas:

The position of Senior Software Developer encompasses the following major functions or Key Result Areas:

- Software/systems development support for SPC members (50%)
- OFP database management systems (35%)
- Capacity building of SPC members (10%)
- Regional oceanic fishery data management services for WCPFC, FFA and PNA (5%)

The requirements in the above Key Result Areas are broadly identified below.

Jobholder is accountable for	<i>Jobholder is successful when</i>
<p>1. Software/systems development support for SPC members (50%)</p> <ul style="list-style-type: none"> • Design, develop and maintain national fisheries database management systems, in particular, the TUFMAN2 tuna fisheries database management system. 	<ul style="list-style-type: none"> • Tuna fisheries database systems have been designed and developed in an efficient and timely manner and satisfy the requirements of member countries, including their obligation as members of the WCPFC • Tuna fisheries database systems are maintained on a regular basis and kept fully functional
<p>2. OFP database management systems, tools and data workflows (35%)</p> <ul style="list-style-type: none"> • Design, develop, document and maintain the regional tuna fisheries database systems for the registration, entry, importing and querying of data • Design, develop, document and maintain data workflows • Dissemination of OFP data and data summaries in accordance with the OFP policy on the dissemination of data, as requested 	<ul style="list-style-type: none"> • Tuna fisheries database systems have been designed and developed in an efficient and timely manner and satisfy the requirements of the OFP • Tuna fisheries database systems are maintained on a regular basis and kept fully functional • Documentation of the structure and administrative procedures of the regional tuna fisheries database systems are updated to reflect new systems and changes to existing systems • Data analyses have been undertaken in a timely manner and data summaries have been disseminated in accordance with OFP policy in an efficient and timely manner
<p>3. Capacity building of SPC members (10%)</p> <ul style="list-style-type: none"> • Oversee the organisation, design and delivery of data management training • Train national staff in the use of in-country fisheries database management systems • Provide advice and technical assistance on IT infrastructure and network setup. Arrange solutions for those that need hardware / software upgrades. 	<ul style="list-style-type: none"> • Training courses have been designed and managed to meet the member countries requirements • National staff have been trained during at least two in-country visits per annum • At least four training attachments have been conducted at SPC headquarters per annum • Contributions have been made to regional tuna data training workshops, when held • Countries have appropriate hardware and network setups to suit their needs.
<p>4. Regional oceanic fishery data management services for WCPFC, FFA and PNA (5%)</p> <ul style="list-style-type: none"> • Incorporate data provided by WCPFC members under the WCPFC's data provision policy into existing databases and facilitate access of WCPFC Secretariat staff to those data as appropriate. • Provide data analysis and management services to the WCPFC Secretariat • Disseminate WCPFC data and data summaries in accordance with the WCPFC Rules and Procedures for the Protection, Access to and Dissemination of Data compiled by the Commission, as requested • Provide data analysis and management services to FFA and the PNA 	<ul style="list-style-type: none"> • All data provided by WCPFC members have been incorporated into the WCPFC databases and the WCPFC databases at the Secretariat's headquarters in Pohnpei have been updated at least twice a year • Data analysis and management services have been provided to the WCPFC Secretariat in an efficient and timely manner • Data and data summaries have been disseminated in accordance with the Rules and Procedures in an efficient and timely manner • Data analysis and management services have been provided to FFA and PNA in an efficient and timely manner

The above performance standards are provided as a guide only. The precise performance measures for this position will need further discussion between the jobholder and supervisor as part of the performance development process.

Most Challenging Duties Typically Undertaken (Complexity)

- Designing and developing innovative/state-of-the-art web and mobile device applications to acquire, manage and report on fisheries data
- Leading the work of other OFP developers in database systems projects
- The ability to lead staff but also possess expertise in hands-on, web and mobile-device application development skills
- Satisfying individual countries’ needs with products designed to be used at the regional scale
- Resolving complex IT issues with people who have no technical background
- Identifying custom solutions for countries with different levels of IT expertise and local IT support, which may be lacking in some countries

Functional Relationships & Relationship Skills:

Key internal and/or external contacts	Nature of the contact most typical
<p>External:</p> <ul style="list-style-type: none"> • National fisheries data management staff in Pacific Island Countries • IT consultants • FFA IT staff • Scientists external to SPC • Other RFMO data managers 	<ul style="list-style-type: none"> • Lead role in provision of IMS and database design and development advice • Advice and support for the national tuna fishery database systems • Collaboration on the design and development of regional IMS/database management systems • Response to various ad hoc requests for data and data summaries
<p>Internal:</p> <ul style="list-style-type: none"> • OFP Data Management Staff • Other OFP Sections staff, including research scientists 	<ul style="list-style-type: none"> • Managing innovative/state-of-the-art database development projects • Performance appraisal, work planning, delegation of ad hoc requests for data and data summaries • Collaboration on the design of database modules and requests for data and data summaries

Level of Delegation:

Routine Expenditure Budget: EUR 0

Budget Sign off Authority without requiring approval from direct supervisor: EUR 50

Person Specification:

This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what the current position holder has.) This may be a combination of knowledge / experience, qualifications or equivalent level of learning through experience or key skills, attributes or job specific competencies.

Qualifications

Essential:	Desirable:
<ul style="list-style-type: none"> Master’s degree in information technology with focus on programming/development or equivalent body of knowledge and experience 	

Knowledge / Experience

Essential:	Desirable:
<ul style="list-style-type: none"> Minimum of 7 years of experience in systems development, including at least two years demonstrated experience developing web applications using Angular, C#, JavaScript and similar products At least 5 years of experience developing and maintaining large-scale relational database management systems, ideally using MS SQL Server Experience as an analyst, working with the client to get their information system requirements Knowledge of fisheries and experience with fisheries database systems Good communication skills Ability to work and travel in a multicultural and multilingual environment 	<ul style="list-style-type: none"> Knowledge of Python for data engineering Knowledge of cloud hosting Proficient working and communicating in English with a working knowledge of French

Key Skills /Attributes / Job Specific Competencies

The following levels would typically be expected for the 100% fully effective level:

Expert level	<ul style="list-style-type: none"> Web and mobile device application development JS/Angular Dotnet Framework and C# SQL Server Relational database management and software development Analyst and Developer skills
Advanced level	<ul style="list-style-type: none"> Communication skills Git/GitHub High-level interpersonal skills (internal and external) Data Management principles Tuna fisheries in the Western and Central Pacific Ocean
Working Knowledge	<ul style="list-style-type: none"> MS Azure hosting and services Python Oral and written communication skills Designing and conducting training courses Tuna fisheries data collection methods
Awareness	<ul style="list-style-type: none"> Principles of fisheries stock assessment Principles of fisheries management Tuna biology GIS techniques SPC Regulations and Policies

Key Behaviours

*All employees are measured against the following **Key Behaviours** as part of Performance Development:*

- Ability to make decisions independently
- Responsibility for key function of the OFP
- Showing personal accountability
- Demonstrating technical expertise
- Responding quickly and efficiently to problems
- Showing commitment and curiosity

Personal Attributes

- Ability to work effectively within and motivate a team
- Patience and ability to keep focused on the job
- Effective communicator
- High motivation
- Resilience

Change to Job Description:

From time-to-time it may be necessary to consider changes in the job description in response to the changing nature of our work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by SPC. This Job Description may be reviewed as part of the preparation for performance planning for the annual performance cycle.