

Arun THANGAMANI**Compilers, code optimization and high-performance computing** arun.thangamani@etu.unistra.fr**Core business****PHASE 1 Skill development**

- *Sets his professional goals to be ambitious yet realistic.*
- *Identifies and develops means to enhance his employability throughout his career; manages his professional development.*
- *Broadens and upgrades his skillset, personal qualities and achievements.*
- *Uses his networks to expand his scope of competence.*
- *Knows how to transfer his expertise to other fields of activity.*
- *Realizes the necessarily international dimension of his career path.*
- *Accepts input from a mentor or coach to benefit his professional development.*

PHASE 1 Evaluation

- *Evaluates the value of various documents concerning his field of expertise.*
- *Is able to judge his own results in terms of both quality and added value.*
- *Is willing to expose ideas to a critical audience; takes others' opinions of his work into account.*
- *Is willing to evaluate the work of other contributors and provides reasoned, realistic judgments of others' work.*

PHASE 1 Information management

- *Knows how to review the state of the art (SOTA) in a scientific topic.*
- *Makes efficient use of information-gathering methods, identifies pertinent resources, particularly bibliographic resources.*
- *Masters web-based research (e.g., bibliographic databases, patent databases)*
- *Knows how to judge the pertinence of information, critique sources and check source reliability.*
- *Designs and implements information-gathering and management systems using suitable technology.*
- *Addresses issues relating to the security and life cycle of data.*
- *Seeks out support from experts in information and data management.*

PHASE 1 Expertise and methods

- *Masters the basic knowledge and key concepts of his field and knows their history and their significance.*
- *Is familiar with recent progress in his field.*
- *Can view his research activities within an international context.*
- *Is familiar with the investigative methods and techniques of his field (including mathematics and statistics) and can explain why they are appropriate for a given purpose.*
- *Is able to consider alternative methods and techniques.*
- *Is able to formulate problems and hypotheses according to needs.*



Personal and relational qualities

- Defends his research findings in a constructive manner; provides evidence to support his ideas and proposals.
- Organizes his presentations in a clear, informative and concise manner.

PHASE 1 Communication

- Knows how to put together a persuasive presentation and communicate about his project or his activity.
- Understands, interprets and communicates appropriately in a register suited to his aims and his audience.
- Masters a range of communication tools.
- Masters his online identity.
- Contributes to the dissemination of knowledge within the company, and demonstrates effective teaching skills.
- Is proficient in at least English and one other world language.

PHASE 1 Collaboration

- Develops and maintains cooperative networks.
- Knows how to build a professional network for his own and the company's benefit.
- Is considered an authority in his field of expertise.
- Is able to envisage his work in a partnership framework; evaluates the benefits and limitations of a partnership and identifies shared and conflicting interests.

PHASE 1 Open-mindedness and creativity

- Demonstrates an ability to acquire knowledge; shows flexibility and open-mindedness. Engages in interdisciplinary activities.
- Possesses a constructive style of questioning and scientific doubt.
- Develops, takes ownership of and tests new ideas; is clever; seizes opportunities.
- Interacts with and seeks the collaboration of professionals of different cultures; knows how to accommodate cultural differences.

PHASE 1 Integrity

- Respects the standards and practices of his entity.
- Demonstrates integrity in the processing and dissemination of data.
- Demonstrates integrity with respect to his partners' or competitors' contributions in accordance with intellectual property rules.
- Upholds the confidentiality and anonymity of subjects taking part in studies and research.
- Honors his commitments and ensures the congruence between actions and words.
- Declares any conflict of interest.

PHASE 1 Listening and empathy

- Has the ability to listen in various situations.
- Understands the needs and way of thinking of the people he deals with, including those with a different field of expertise, occupation and/or culture.

PHASE 1 Negotiation

- Is able to detect people's unstated needs based on the requests they formulate.
- Knows how to reconcile the drivers, requirements and constraints of his contacts to reach a

consensus, and is able to gather all the information needed to do so.



Business management and value creation

PHASE 1 Project management

- *Plans projects to meet goals in accordance with strategy and priorities, and taking quality, deadline and budget constraints into account.*
- *Knows how to write specifications.*
- *Is accountable for resources used and for meeting the deadlines and quality requirements of the deliverable.*
- *Reacts efficiently and appropriately to change and unforeseen events.*
- *Conducts his project within a framework of auditing and evaluation, deploying the appropriate systems.*

PHASE 1 Decision-making

- *Knows how to make appropriate decisions for each phase of his project.*
- *Assists his line management in making major decisions (e.g., reporting, scenarios)*

PHASE 1 Obtaining and managing funding

- *Manages his own funding and is comfortable in discussions with budget, financial and economic decision-makers.*
- *Understands the funding process and knows how to determine the profitability of an activity.*
- *Knows how to answer a request for proposals and/or write a grant application.*

PHASE 1 Customer focus

- *Is attentive to national and international markets; takes incoming and outgoing communication (suppliers, customers) into account.*
- *Gathers information on the needs and expectations of internal and external customers.*
- *Uses his technical expertise and familiarity with products to propose solutions tailored to customers.*
- *Masters the basics of marketing.*

