



Julien Ponge, PhD

Senior Principal Software Engineer





```
MS-DOS Prompt - QBASIC
File Edit View Search Run Debug Options Help
ROBOT.BAS
DECLARE SUB FischerInstall ()
DECLARE SUB MotorsOff ()
DECLARE SUB Motor (MotorNo%, Direction%)
DECLARE SUB OutputWord (Value%)
DECLARE SUB FischerSet (Port%, AnalogSet%, OutDelay%)
DECLARE FUNCTION SwitchIn% (E1 to E16%)
DECLARE FUNCTION InputWord% ()
DECLARE FUNCTION AnalogIn% (EXorEY%)
DECLARE FUNCTION InternalPCFunc% (EXorEY%)
'
' QBASIC Interface drive routines
' IBM Personal Computer
' Copyright (C) Procon Technology 1995
' Version 2.0
'
CONST E1 = 1, E2 = 2, E3 = 3, E4 = 4
CONST E5 = 5, E6 = 6, E7 = 7, E8 = 8
CONST E9 = 9, E10 = 10, E11 = 11, E12 = 12
CONST E13 = 13, E14 = 14, E15 = 15, E16 = 16
CONST EX = 0, EY = 1
CONST MOFF = 0, MCCW = 1, MCW = 2, MON = 3

DIM SHARED Fischer%(0 TO 511)

DEF SEG = VARSEG(Fischer%(0))
BLOAD "fischer.bld", VARPTR(Fischer%(0))
DEF SEG

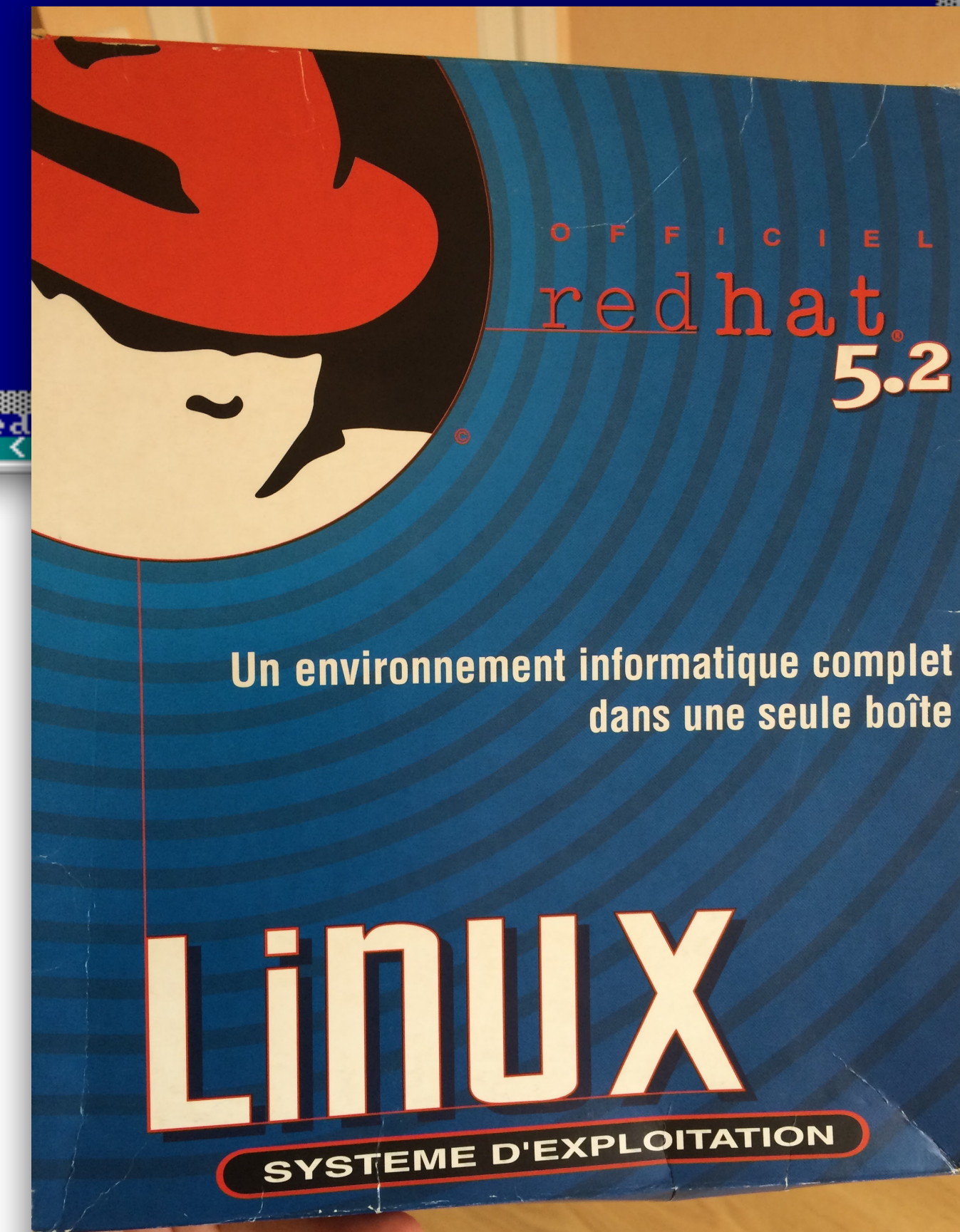
FischerInstall
HandOpen 30
ArmUp 30
ArmLeft 150

ArmRight 75
ArmDown 10
HandClose 20

ArmUp 30
ArmLeft 150
ArmDown 10

HandOpen 30
ArmUp 30

Immed
<Shift+F1=Help> <F6=Window> <F2=Subs> <
```





UNSW
SYDNEY

🎓 Master **2004**

🎓 Doctorat 🇫🇷 – PhD 🇦🇺 en co-tutelle **2008**

Model-based Analysis of Time-aware Web Services Interactions

Encadré par Farouk Toumani (UCA) et Bouallem Benatallah (UNSW)

2009 – Maître de Conférences (INSA Télécom, Laboratoire CITI)

2012 à 2017 – Responsable et croissance parcours international IST

2014 à 2017 – Directeur Adjoint CITI (industrie et société civile)

2016 à 2017 – Directeur scientifique Chaire Spie ICS

2 thèses soutenues : Stefan Chitic (MENRT) et Patrik Fortier (Chaire Spie)

1 thèse en cours : Arthur Navarro (CIFRE Red Hat)

Challenges du contexte recherche



2014 – Début collaboration, échanges avec Newcastle University (UK)

2016 – Demi-délégation



2017 – Délégation

2018 – Disponibilité

Principal Software Engineer (*individual contributor*)

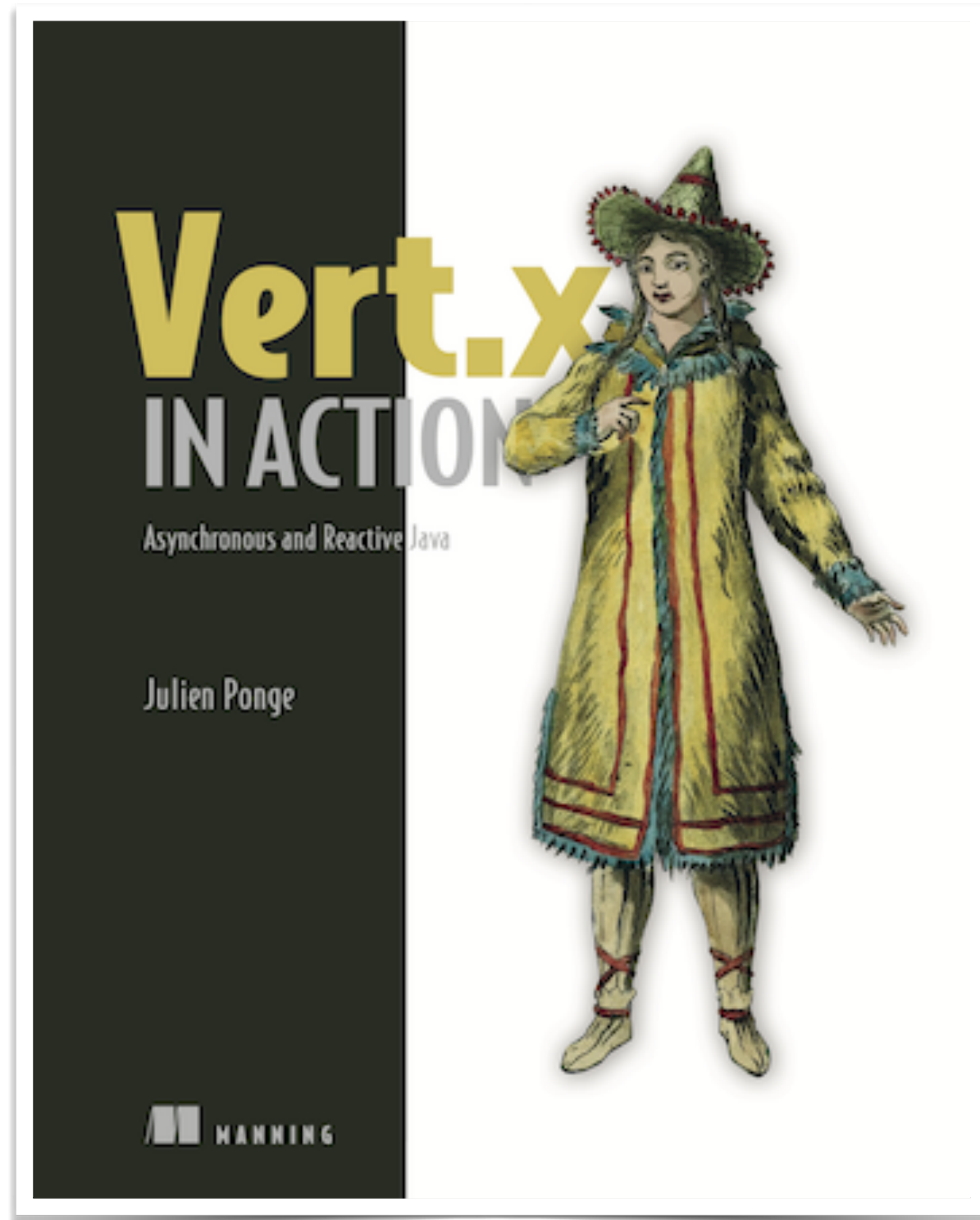
2024 – Senior Principal Software Engineer

VERT.X™



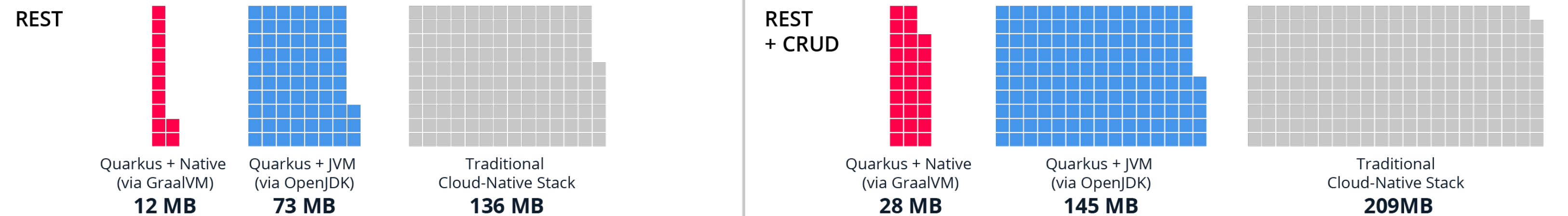
MUTINY

QUARKUS

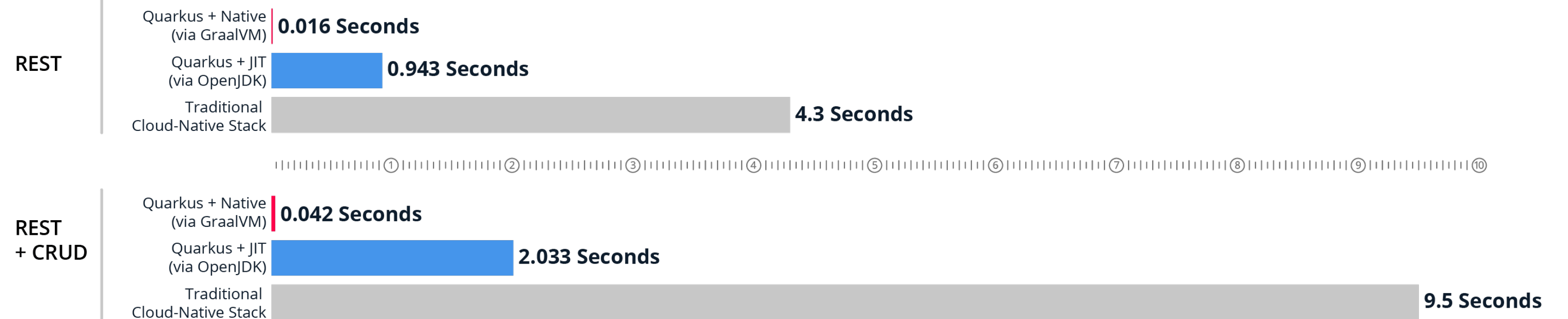


Memory (RSS) in Megabytes*

*Tested on a single-core machine



BOOT + First Response Time



Julien Ponge, Arthur Navarro, Clément Escoffier, and Frédéric Le Mouël. 2021. **Analysing the Performance and Costs of Reactive Programming Libraries in Java**. In Proceedings of the 8th ACM SIGPLAN International Workshop on Reactive and Event-Based Languages and Systems ([REBLS '21](#)), October 18, 2021, Chicago, IL, USA. ACM, New York, NY, USA, 10 pages.

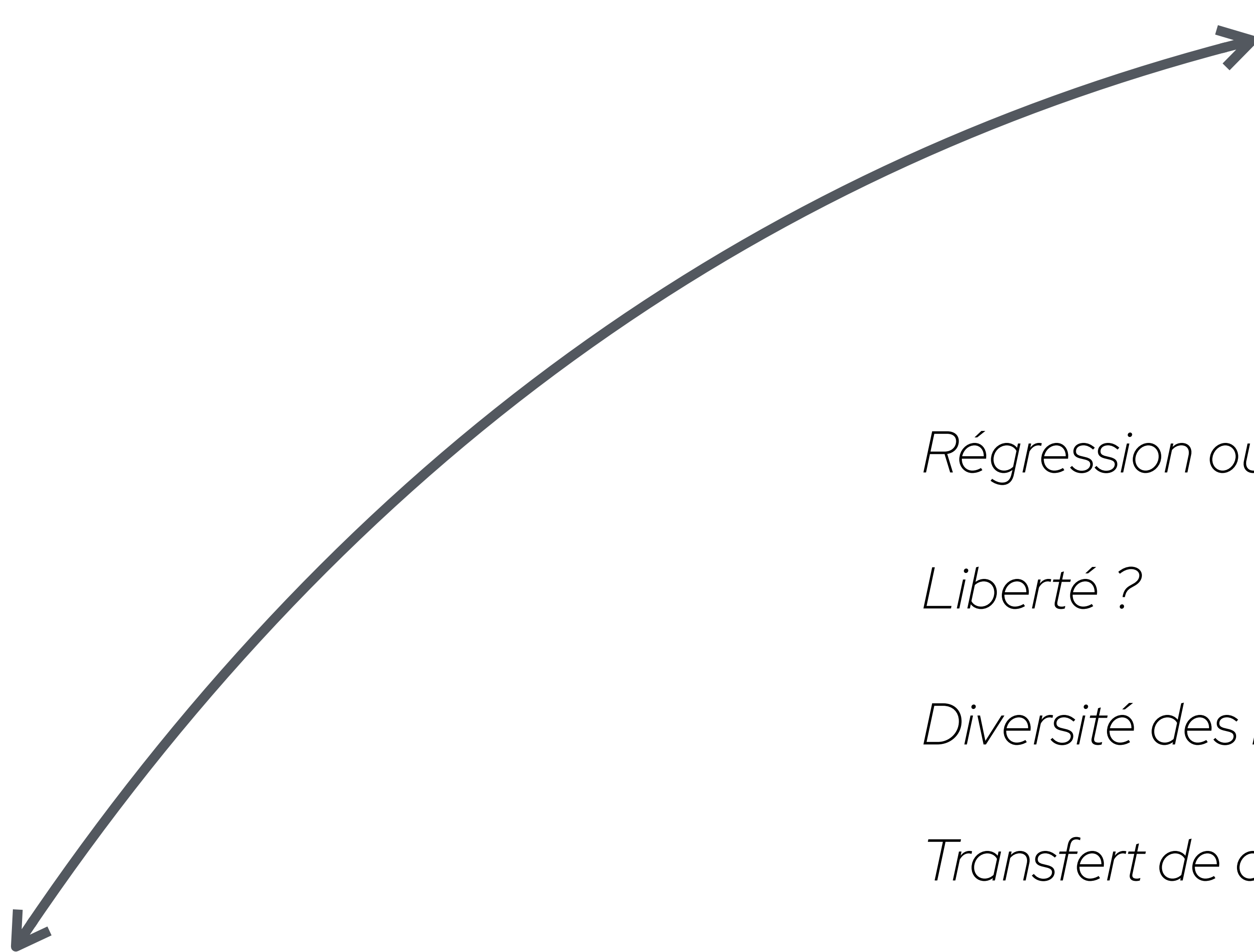
Patrik Fortier, Frédéric Le Mouël, and Julien Ponge. 2021. **Dyninka: a FaaS framework for distributed dataflow applications**. In Proceedings of the 8th ACM SIGPLAN International Workshop on Reactive and Event-Based Languages and Systems ([REBLS '21](#)), October 18, 2021, Chicago, IL, USA. ACM, New York, NY, USA.



Arthur Navarro, Julien Ponge, Frédéric Le Mouël, and Clément Escoffier. **Considerations for integrating virtual threads in a Java framework: a Quarkus example in a resource-constrained environment**. DEBS'23 (17th ACM International Conference on Distributed and Event-based Systems), June 2023, New-York, NY, USA.

Julien Ponge and Mark Little. **Scalability and resilience in practice: current trends and opportunities**. SRDS 2019 (38th International Symposium on Reliable Distributed Systems), October 2019, Lyon, France.

🎓 Maître de Conférence



💻 Principal Engineer

Régression ou évolution de carrière ?

Liberté ?

Diversité des missions ?

Transfert de compétences ?

Quel intérêt pour l'établissement ?