Ideas for genomics project: introduction to the series.

As I am very active in inventing 101 ideas for business each day I should start to write them down long time ago. But anyway, it is never too late to start ... so let me start :).

In a series of posts tagged with ideas-for-genomics-project [http://scalaakka.blogspot.com/search/label/ideas-for-genomics-project] I will describe ideas for business that can be build in area of genomics. If you like those ideas and you would like to join as an investor, co-founder or consultant please contact me at LinkedIn [https://pl.linkedin.com/pub/artur-stanek/a5/643/691] or just drop me an email, stanek.artur@gmail.com [mailto:stanek.artur@gmail.com].

This post is just an introduction to the series. I wonder where I can use my passion and - what's the most important - where the power of Scala [http://www.scala-lang.org/] programming language (and its ec [http://akka.io/] osy [https://github.com/gearpump/gearpump] ste [http://spark.apache.org/] m) can be used in genomics field.

Just to list some of Scala's strengths and features:

- (Scala [http://www.scala-lang.org/]) power of the compiler, strong and rich type system, macros, compiler plugins,
- (Scala [http://www.scala-lang.org/]) internal and external DSLs, powerful and easy to use parser combinators,
- (Akka [http://akka.io/]) reactive streams (balanced and safe way for parallel processing in a from of graphs with automatic demand/back pressure management that can be potentially materialized not only on classical CPUs),
- (Akka [http://akka.io/]) reactive paradigm, actors model, state machines (FSM), dynamic clusters, parallel processing, conflict free replicated data types, localization transparency, self healing, Akka Typed,
- (Apache Spark [http://spark.apache.org/] , GearPump [https://github.com/gearpump/gearpump] , Apache Flink [https://flink.apache.org/]) massive, parallel processing,
- (Scala [http://www.scala-lang.org/]) value classes / universal traits, lazy streams.

Next post in this series: "SafeGenome - introduction and diagram [http://scalaakka.blogspot.com/2015/10/ideas-forgenomics-project-diagram-of.html] ".

Posted 30th October 2015 by Artur Stanek (kermitas)

Labels: Akka, Apache Flink, Apache Spark, bioinformatics, GearPump, genomics, ideas-for-genomics-project, non web find, SafeGenome, Scala

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