# **Anton Kraievyi: Curriculum Vitae**

Aim: Site Reliability Engineer

#### **Contacts**

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#### **Education / Academia**

- o WorldQuant University Data Science (plus ML part), 2021
- o Scala Principles of Reactive Programming, 2014
- 2005 M.Sc. «<u>Systems and Methods of Decision-Making</u>», Institute of Applied System Analysis of NTUU «Kyiv Polytechnic Institute», Ukraine

#### Soft Skills

- Work for the product: track cost implications and business impact for changes and incidents
- Play for the team: balance autonomy and efficiency, manage interrupts and long-term backlogs
- o Manage delivery: focus on blockers on critical path, engage owners, set example for execution and code quality
- o Strive for simplicity: best architecture forces fewest lock-ins, good design is invisible

### **Hard Skills**

Styles: complex tasks within last year, moderate complexity within last year, not used for at least a year

- o Infrastructure: Terraform, Docker, Kubernetes, Kustomize, Helm
- Cloud Service Providers: Amazon Web Services, Google Compute Platform, Microsoft Azure, OpenShift
- Continuous Delivery: GitHub Actions, AWS CodePipelines, Azure DevOps Pipelines, CircleCl, TeamCity, Jenkins
- Observability: Prometheus, Grafana, Kibana, strace, Sentry, NewRelic, Zabbix, Graylog
- o Algorithm Design: pandas, numpy/bottleneck/numba, <u>HackerRank</u>, <u>CodeJam</u>, <u>TopCoder</u>
- System Architecture: BPMN 2, UML, GoF/J2EE patterns
- o Data stores: Postgresql, BigQuery, Redis, Hadoop, RedShift
- Event Streaming: Apache Kafka, ReactiveX, Spark Streaming, Flask
- o Automation Scripting: bash + coreutils, jq, JMESPath/gjson, make invoke
- o Test-driven Development: unit testing, mock-objects, behaviour-driven tests
- o Object-oriented Programming: python, go, Java, rust
- Functional Programming: Scala, Iodash/d3 (javascript), Haskell
- Build Automation: Please (similar to Bazel, please see <a href="here">here</a>), poetry, sbt, gradle, maven, ant
- Source control: git, git flow, subversion
- o Security: checkov, terraform-compliance, Contrast (dynamic vuln scanning), code obfuscation

## **Personal Info**

Areas of interest: portfolio construction, timeseries prediction, statistical analysis and inference, complex networks

Preferred tools: Ubuntu/XFCE, IntelliJ, zsh, tmux, silversearch, fzf

Languages: English - C1, 2015; Russian, Ukrainian - native

# **Employment History**

| Time                    | Employer                    | Position   |  |
|-------------------------|-----------------------------|--|--|
|                         | Technologies                | Project Domain   |  |
| curren<br>-<br>Sept 202 | Thought Machine             | Site Reliability Engineer  |  |
|                         | Opsgenie Terraform Bigguery | Took part in implementation of long-term summary reporting pipeline for opsgenie alert |  |

Opsgenie, Terraform, Bigquery

Took part in implementation of long-term summary reporting pipeline for opsgenie alert and incident data. Ported existing manual opsgenie policy setup to declarative terraform.

|                           | Google Cloud, Amazon Web Services   | Led a project to implement cross-cloud connectivity solution with extra detail to availability SLAs.   |  |  |  |
|---------------------------|---|--|--|--|--|
|                           | Microsoft Azure, Terraform, Please  | Led a project to make existing product provisioning automation support a new cloud service provider.   |  |  |  |
|                           | AWS CodeBuild, AWS CodePipelines,<br>Terraform, Please                                  | Led a project to automate provisioning for a dedicated PCI DSS-compliant environment.  |  |  |  |
|                           | AWS EKS, kubernetes autoscaler, AWS VPC CNI plugin, external-dns, cert-manager          | Took part in several smaller projects to improve cost efficiency and stability of product workloads for both EKS and GKE. Typical day-one operations for spot interruptions and mass node restarts for k8s version upgrades. |  |  |  |
|                           | ginkgo, gomock, prometheus, trivy   | Improved coverage for vulnerability scanning, service-level metrics, and alerting. Led tech response for internal incidents, with reasonable success rate; took part in production on-call.                                  |  |  |  |
| Aug 2021<br>-<br>Aug 2019 | Babylon Health - Developer Experience   | Senior Software Engineer   |  |  |  |
|                           | python, shell, rust, kubernetes<br>Jenkins, Sentry, NewRelic, Slack API                 | Extend declarative <u>infra-as-code stack</u> with components to model/automate configuration for Sentry/NewRelic microservice monitoring integrations   |  |  |  |
|                           | Contrast Security<br>gradle, docker-compose, java/spring-<br>webmvc, python/flask, hugo | Prototype/test/document <u>Contrast Security</u> vulnerability scanning in multiple existing projects  |  |  |  |
|                           | postgres, go, make, terraform<br>grafana, jenkins, AWS (S3/IAM)                         | Improve microservice deployment monitoring and auditability  |  |  |  |
|                           | Azure DevOps pipelines, Spinnaker python/flask, github/jira APIs, docker, shell         | Battle-test/document/maintain next-generation Continuous Delivery/Compliance platform  |  |  |  |
|                           | Azure DevOps pipelines terraform, shell, AWS (EC2/CloudFormation)                       | Extend <u>infrastructure-as-code provisioning</u> for Continuous Delivery/Compliance platform  |  |  |  |
| Aug 2019                  |   |  |  |  |  |
| -<br>Oct 2015             | Captify Media   | Software Architect + Technical Lead + Site Reliability Coach   |  |  |  |
|                           | Kafka+Spark Streaming<br>Cloudera+Mesos+Singularity                                     | Switching Spark pipelines from Batch to Structured Streaming   |  |  |  |
|                           | Docker+Kubernetes, Python+Teamcity+Amazon Services Graylog+InfluxDB+Grafana             | Production health-checks and monitoring  Extracting microservices, implementing CI/CD workflows  Documenting system architecture as series of BPMN diagrams  |  |  |  |
|                           | Unfiltered, Spark   | 20+ micro-modules: blocks of search retargeting pipeline + shared utility libraries  |  |  |  |
|                           | Impala, Postgres, Amazon RedShift   | Migration of analytic workflows from RedShift to Impala  |  |  |  |
|                           | Play!, Spark, Guice   | Enacting Dependency Injection in Play! and Spark modules   |  |  |  |
| Oct 2015<br>-<br>Nov 2013 | Innovecs, for Captify Media   | Technical Lead + Team Lead   |  |  |  |
|                           | Scala 2.10, Play 2.2, Akka 2.3, Angular.js, D3.js                                       | C3 - Ad Ops planning/reporting/content-management frontend   |  |  |  |
|                           | Spark 1.6, PostgreSQL 9.3,<br>Amazon RedShift   | ETL/DB backends for ad placement planning, reports and billing   |  |  |  |
| Oct 2013                  |   |  |  |  |  |
| -<br>May 2012             | StrikeAd  | Scala Backend Developer -> Team Lead   |  |  |  |
|                           | Google BigQuery, Hadoop/Pig   | Fusion 2 Slicer - Aggregation/Reporting Web Application  |  |  |  |
|                           | Scala, Play 2.0, MongoDB, Javascript,<br>Kendo Ul                                       | Fusion 2 - AdTech Trading Desk Web Application   |  |  |  |
| May 2012                  |   | Out to the Post to the   |  |  |  |
| -<br>May 2011             | Globallogic   | Senior Java Developer  |  |  |  |
|                           | Jetty, SmartGWT, Axis   | Enterprise GUI: web application to manage corporate accounts for Telcordia Broadband Charging System   |  |  |  |
|                           | Spring, JBoss, Oracle TimesTen, Fitnesse,<br>Ant  | Telcordia Broadband Charging System: feature development, integration testing, team branch isolation   |  |  |  |

| May 2011<br>-<br>Sept 2009 | Department of Math Methods of System<br>Analysis; NTUU "Kyiv Polytechnic Institute"                     | Assistant: Computer Networks / Software Engineering courses  |  |  |  |
|----------------------------|---|--|--|--|--|
| 2-p. 2003                  | VNC + Freemind + ELW (see below)  | Developing and conducting crash course for junior Java developers, arranged with EPAM Systems  |  |  |  |
|                            | Spring-MVC/Velocity, CoachDB  | <u>ELW</u> : design, development, maintenance of courseware webapp with approval/scoring functions   |  |  |  |
|                            | Swing, Spring, JDBC, H2   | holonet: design and development of a platform for statistical and discrete-event simulation of complex networks and DHT protocols genetic/spectral optimizations of overlay networks up to 4k nodes  |  |  |  |
| Apr 2011                   |   |  |  |  |  |
| -<br>Jan 2007              | codebistro.com  | Project technical leader (remote)  |  |  |  |
|                            | JQuery, Spring-MVC, Velocity, JPA, H2   | XRFiles/XRSend: development and maintenance of X-Ray/MRT peer-review web-<br>application   |  |  |  |
|                            | JQuery, Spring-MVC, Velocity  | Glider/BQuick-NG: development and mainenance of successive versions of BQuick: striped streaming, interleaved asynchronous JSON/binary network protocols   |  |  |  |
|                            | Swing, Google Protobuf, Spring-MVC,<br>Velocity   | BProof: maintenance of pre-publishing review/approve web-application   |  |  |  |
|                            | Servlets, picoContainer, xFire, HttpClient  | BQuick transfer manager: design, development, maintenance of distributed media streaming application   |  |  |  |
| Oct 2006                   |   |  |  |  |  |
| -<br>Jun 2006              | Incom   | Java Developer   |  |  |  |
|                            | J2SE 1.5, Struts, Ant, XSLT   | Kyivstar SelfCare Portal: maintenance, extending continuous integration/deployment   |  |  |  |
|                            | Swing, JDBC, Oracle 9i, CruiseControl   | Resource Manager: simple Swing database front-end, database integrated with CruiseControl SourceControl interface to trigger builds by changes   |  |  |  |
| Jun 2006                   |   |  |  |  |  |
| -<br>Jan 2005              | Vested Development, Inc.  | Java Developer   |  |  |  |
|                            | J2EE 1.3 (Servlets, JSP, EJB, JetSpeed,<br>Turbine, Jasper Reports), Oracle 9i, Linux,<br>CruiseControl | Lighthouse Project Management portal: implementation design for Testing module, design/implementation/QA for main Project Management module.  Led cross-vendor SVN repository replication efforts.   |  |  |  |
|                            | Same + Jakarta POI, AJAX  | Lighthouse Custom Reporting module: led a team of 3 developers, covering estimations, requirement review and implementation/QA.  Lighthouse Requirement Management Module: a partial rewrite of existing implementation, featuring dynamic AJAX-based web interface.   |  |  |  |
| Jan 2005                   |   |  |  |  |  |
| -<br>May 2004              | Ciklum Ltd, for ExcelData   | Java Developer   |  |  |  |
| Way 2004                   | J2SE 1.4, Swing, custom DOM-based XML<br>API  | InfoSuite: Design, development and maintenance of several replacement modules for in-house ERP system.   |  |  |  |
| May 2004                   |   |  |  |  |  |
| -                          | rentacoder  | Java/Javascript Developer  |  |  |  |
| Feb 2004                   | J2SE 1.4, JAXP(DOM/SAX), AXIS, Swing,<br>Java 2D, Java Web Start  | TOM: Wrapping socket stream based communication protocol into web service in an existing software project.  Chord: Redesign and extend a simulation of peering network protocols  SixSigma: Math core of portal system to be used for statistical analysis of business |  |  |  |
| Jan 2004                   |   | data   |  |  |  |
| -<br>Jul 2003              | Dev Zero G Ltd.   | Java Developer   |  |  |  |
|                            | J2SE 1.3.1, Java Servlets/Applets, Struts,<br>Java ImagelO, PostgreSQL                                  | SiqoCMS: JSP-Based Content Management System. Development/unit-testing/maintenance   |  |  |  |
|                            | Same  | FlatPlan: JSP-Based preprint management solution. Development/unit-testing/maintenance   |  |  |  |
|                            | Same  | PrintSure: Pre-flight checking solution. Development/unit-testing  |  |  |  |