KORY KIRK
TECHNICAL LEADER

kory@korykirk.com
korykirk.com
github.com/koryk
linkedin

Profile

10+ years of technical experience ranging from big data machine learning, creating population health monitoring devices, building distributed virtualization appliances, programming advanced network protocols, creating virtual worlds and implementing novel artificial intelligence techniques. 6+ years of experience of technical leadership from team lead to senior management.

Skills

Software Engineering

Ability to analyze software specification in order to choose design patterns which ensure a systematic development process of a robust piece of software.

Pragmatic Best Practices

Experienced with design and implementation of large scale distributed systems. Always focused on the "ity's" - scalability, security, stability, maintainability, and extensibility.

Operational Focus

Continually focused on improving feedback loops and skillsets, removing constraints, exploiting strengths and advantages. Improving software development through retrospectives, post-mortems and analytics.

Technical

IOS & Android	Containerization (k8s, helm)	Java, C#
Graph DB (Tinkerpop, Neo4J)	Cloud (AWS, GCP, Azure)	Node js
NoSQL (MongoDB, Riak, Redis)	git, svn, cvs	Linux, Unix, OSX, Windows

Experience

Big Fish Games
Technical Lead   09/2021-Present

Technical Lead of Solutions Reliability Team (SRE). Responsible for ensuring detection of degraded performance, outages and partial outages of game portfolio. Worked closely with game development teams to ensure availability, stabilitiy and reliability of systems moving to the cloud. Migrated monitoring and alerting of legacy systems from Nagios to New Relic. Built cloud infrastructure to support bespoke monitoring solutions in GCP. Develop and maintain terraform modules to create common monitoring infrastructure for engineering teams across the Aristocrat organization. Agile leader - lead sprint planning, stand ups, long-term roadmaps and quarterly planning. Worked closely with the following technologies: New Relic, Google Cloud Platform, Terraform, Prometheus, Grafana, Nagios, Harness, Jenkins, Team City, Github Actions, GCP Cloud Build.

Shutterfly Inc.
Principal Engineer   10/2018-09/2021

Technical Lead of brand-wide initiative to increase user engagement. Team leader for Snapfish experimental feature team. Responsible for developing new product capabilities such as: single sign-on, advanced metadata extraction, product recommendation, facial clustering and search. Responsible for providing architectural guidance for development of new technical capabilities such as: migration of VM-based services to containers using Kubernetes, Kafka integration, Graph databases (Neo4J, Janusgraph), integration of Spring Boot into development ecosystem, and hybrid cloud migration. Leader of Engeering training for AWS Solutions Architect Associate Certification. Implemented APIs with Java and Spring Boot. Worked closely with the following technologies: Docker, Kubernetes, Helm, AWS (ec2, eks, lambda), Terraform, Packer, Janusgraph, Neo4J, Apache Tinkerpop, Gremlin, ScyllaDB, Kafka, MongoDB, Splunk, Prometheus, Grafana.

Portalarium   10/2017-07/2018
Senior Programmer

Worked on the Massively Multiplayer Online PC game: Lord British's Shroud of the Avatar. Responsible for maintenance, scaling and monitoring of web servers, log-in servers and game server firewalls. Implemented features such as the in-game and online map systems, Custom Heraldry building website and the eCommerce platform using: php, node.js, python, leaflet.js, vue.js. Worked closely with the following technologies: ECS, MariaDB, docker, HAProxy, TeamCity, Elastic Stack, AWS lambda.

Health Recovery Solutions   11/2015-10/2017
VP of Engineering

Grew development team from 3 to 15. Worked with team to implement agile development methodologies, created QA team, created build pipeline, implemented CI/CD for multiple projects. Responsible for design and architecture of product, integrations with hospitals, security, HIPAA compliance, development team managemet, and server architecture. Designed and implemented features using: php, java, bash, node.js, bash, coffeescript. Worked closely with the following technologies: apache, docker, ecr/ecs, nginx, socket.io, openswan/IPSEC, android, cordova

Nimboxx   05/2013-11/2015
Lead Software Engineer

SCRUM team leader. Git branch maintainer. Responsible for software design and implementation of features such as: VM cloning and migration, high availaibility, support tunnel, distributed storage and cluster membership join / removal. Implemented features in php, c, python, and bash. Worked closely with following technologies: apache, openssl, riak, libvirt, kvm/qemu, collectd, corosync, pacemaker, sheepdog.

Texture Media Inc.   06/2011-05/2013
Senior Software Developer

Responsible for architecture and implementation of new features on multiple PHP web applications on a LAMP stack; application frameworks include: Yii, Cakephp, Wordpress, Vbulletin, and Lemonstand. Responsible for oversight of network security of web servers and applications. Migrated multiple applications from static hosting service to AWS and responsible for performance and maintenance of cloud servers. Use AWS API for scripts to deploy and scale web application servers. Employ machine learning techniques to implement a recommendation engine for users that is driven by the contents' subject, and the behavior of other users.

Sole Proprietorship - Freelance Developer   2010-2011
University of Texas

Created a full featured online course for the University of Texas Chemistry department. Used PHP with Codeigniter framework and MySQL database.

Long Island Taxi

Created an online cashiering web application for a livery taxi company in Long Island, NY

Google Summer of Code
Software Developer   2009-2010
2010

Contributed the Hidden Services feature to Java implementation of the Tor protocol (JTor).

2009

Developed multiple features for the Torbutton Firefox extension, including an HTTP header spoofer
and a feature for selectively choosing cookies to use while browsing anonymously.

Graduate Assistant and Research Assistant
Villanova University   2008-2010

Research Assistant for Data Mining with Machine Learning graduate level course. Graduate teaching
assistant for three Java based Algorithms and Data Structures classes and Ethics in computing class.
Computer Science general tutor for 20 hours a week – included debugging programs in C, C++, Python,
Ruby, Javascript, and Java. Worked with Dr. Mirela Damian on analyzing properties of ad hoc
networks connected with various algorithms. Supported by NSF grant CCF-0728909; Presented
findings at 2008 national Sigma Xi research conference[1].

Education   **Master of Science in Computer Science**
                   Villanova University - Spring 2010
                   Bachelor of Science in Computer Science
                   Villanova University - Spring 2009

Other   **US Amateur Radio License**
                   Technician Class - Callsign: K0RYK

Bibliography   [1] Kirk, Kory E. "Sigma Xi Scientific Research Abstracts" (2008):134. Presented at Sigma
                   Xi Annual Meeting and Research Conference.
                   http://www.sigmaxi.org/meetings/archive/abstracts2008.pdf
                   [2] Kirk, Kory E. Genetic Algorithms and an Exploration of the Genetic Wavelet
                   Algorithm. Villanova University. Ann Arbour: ProQuest, 2010.

Kory Kirk — kory@korykirk.com