# About

Seasoned engineer with many years of software development, developer operations and cluster operations experience.

I have extensive real-world business experience and an excellent track record in designing and implementing complex software solutions with emphasis on customer satisfaction, quality and timely delivery.

# Skills

* C/C++, Golang, JavaScript, Ruby, Python
* Managing and deploying Kubernetes clusters
* Kubernetes ecosystem tools
* CI/CD systems and tools
* 17+ years of software development and program management experience.

# Experience

## Principal Engineer at Samsung SDS America, Inc February 2021 – present

* Designed and implemented the Cloud Native Computing Team’s infrastructure-as-code pipeline
* Designed and implemented various backend services for Samsung SDSA’s Machine Learning Portal
* Contributed heavily to Samsung SDSA’s Machine Learning Portal frontend

## Senior Staff Engineer at Samsung SDS America, Inc March 2018 – February 2021

## Designed and implemented the Cloud Native Computing Team’s Jenkins 2.0 CI/CD pipeline stack, complete with tool helm charts, shared workflow code, secret management, documentation and deployment scripts

* Contributed to various open-source projects

## Staff Engineer at Samsung SDS America, Inc May 2015 – March 2018

* Designed and implemented an in-house solution for deploying Kubernetes clusters on various public cloud providers
* Developed and contributed to various Kubernetes ecosystem tools
* Developed Kubernetes Helm charts for a variety of opens source and customer applications
* Worked on making many business-critical legacy customer applications work in Kubernetes
* Worked on customer CI/CD pipelines

## DevOps engineer at MTN Satellite Communications. July 2013 – October 2014

* Designed and implemented test and integration tools for MTN CI pipeline.
* Created a set of scripts/utilities for modeling a MTN ShipCloud™ in AWS.
* Improved reliability, speed and scalability of MTN CI/CD pipeline.
* Developed and improved a variety of internal Chef cookbooks.

## Android Apps Developer at MTN Satellite Communications. February 2013 – July 2013

* Designed and implemented client-customizable Android front-ends for a variety of MTN on-ship services.
* Designed and implemented an rspec-based functional testing framework for the MTN on-ship application suite.
* Designed and implemented a concurrency and stress testing framework for the MTN on-ship application suite.

## Consultant at StarSightings Inc. October 2010 – Present

* Created first version of [StarSightings for Android](https://play.google.com/store/apps/details?id=com.starsightings.starsightings.android).

## Software Design Engineer at Microsoft. July 2012 – February 2013

* Implemented new features of Ford SYNCII project, including HMI and middle layer.
* Did sustained engineering for Ford SYNC project, including field problem investigations and back-porting of features from Ford SYNC II.
* Worked directly with Ford and Elektrobit employees to investigate and resolve field bug reports.

## Co-Founder, Engineering at TravellingWave Inc. May 2007 - July 2012

TravellingWave develops multimodal interfaces for entering speech into mobile devices. Using a combination of speech recognition and text prediction dubbed “VoicePredict,” TravellingWave’s technology enhances any kind of text input mechanism and allows for fast, easy and accurate data entry.

* Performed engineering duties throughout all phases of software development lifecycle of VoicePredict SDK for ARM/X86 devices and SMS/Email/Facebook/Twitter client for Windows Mobile 6.x.
* Drove development effort from the start, including design and time estimations including design, time estimations and most of the coding.
* Contributed to and implemented interfaces for TravellingWave proprietary noise filtering algorithm.
* Designed and implemented instrumentation system for gathering anonymous user feedback.
* Designed and implemented VoicePredict SMS/Email/Facebook/Twitter client for Windows Mobile 6.x.
* Designed, implemented and maintained company’s website.

## Software Design Engineer at Cisco Systems July 2010 – December 2011

* Developed 1.0 version of Connect Express - an iOS/Android application for controlling a wide range of Cisco/Linksys WiFi routers remotely. For [iOS](http://itunes.apple.com/us/app/id470936137) and [Android](https://play.google.com/store/apps/details?id=com.cisco.connect.express).
* Developed a software/hardware installer application for an upcoming home networking product on OS X and Windows platforms.
* Designed and implemented a localization/internationalization system for Cisco’s upcoming home networking product.
* Worked on parts of Webkit/QT based UI for various product components
* Maintained build system for the product.

## Software Design Engineer at Intrinsyc Software, USA May 2006 – May 2007

Intrinsyc Software’s Soleus is world’s first Microsoft Windows Embedded CE-based mobile handset platform, featuring pre-integrated hardware, software and telephony elements.

* Designed and developed from the ground up a full-featured custom shell for Soleus platform, with support for notifications, custom/animated icons, configurable “today” screen, multiple page layouts and tight integration with other system components.
* Worked on various other platform applications, such as calendar, alarm notifications, etc.

## Software Design Engineer at Microsoft September 2005 – May 2006

* Ported and enhanced an existing test harness for the Windows Vista Tablet Edition.
* Worked on the design and development of a web-based system for running ink tests remotely.

## Software Design Engineer at Conversay Inc. April 2001 – September 2005

* Designed and implemented Conversay’s speech enabled forms automation software for Windows Desktop, including creating functional and design specifications.
* Managed and led two offshore teams developing the Windows Mobile version of the forms automation client and the XML form builder.
* Designed and developed proofs of concept and pilot projects for General Electric Power Division.
* Ported parts of Conversay’s speech recognition SDK to MontaVista HardHat Linux, for deployment on a portable GPS device. Contributed to Conversay’s speech recognition SDK and engine development.
* Developed parts of Conversay’s suite of PIM applications.
* Designed and developed internationalization and localization components for deployment on Samsung phone ROMs.

## Configuration Management Engineer at Conversay Inc. September 2000 – April 2001

* Designed and developed multiple CM tools, supervised VSS configuration and daily builds.
* Helped design, implement and manage Conversay’s proprietary defect tracking tool.

# Education and Achievements

University of Washington (September 1998 – November 2001): Applied and Computational Mathematical Sciences (Applied Math, Statistics, Computer Science) program, incomplete.

Patents: Multimodal interface for input of text (US8571862B2). Detecting segments of speech from an audio stream (US8645131B2).