

Janpreet Singh

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EDUCATION

- **Master of Science in Information Systems** Jan. 2018
Marist College, 3.34 Poughkeepsie, NY
- **Bachelor of Technology in Electronics and Communications Engineering** May. 2012
Guru Tegh Bahadur Institute of Technology, 3.33 New Delhi, India

SKILLS

Kubernetes, OpenShift, Docker, Ansible, Terraform, AWS, Google Cloud, Git, GitHub Actions, Jenkins, Linux, ReactJS, Shell Scripting, Python, Java, Maven, Selenium, SQL, PHP, HTML, Javascript, jQuery, Qlikview, Splunk.

EXPERIENCE

- **Globalfoundries** Malta, NY
Sr. Mfg Systems Engineer, SRE July 2020 - Present
 - Lead architect for a common abstraction layer. An event-driven, API's and microservices-based architecture forecasted to bring an annual incremental gain of \$3.8M by reducing SDLC by over 9k hours and \$6k in cost per site, annually. Codified Container-orchestrated infrastructure, business rules, as well as CDC, with a successful DevOps model for a secure, resilient, and automated deployment strategy.
 - Evangelizing and implementing SRE best practices by utilizing automated deployment procedures using BitBucket, Jenkins and Ansible, for faster deployments and roll-backs.
 - Disposable Kubernetes cluster POC; created using Terraform and Google Cloud Platform. Sample Maven and Python applications built using Jenkins Docker Cloud and deployed using Helm to demonstrate the DevOps model. Wrote a custom Terraform module 'cluster-kubeconfig' to solve GKE module's lack of kubeconfig generation.
- Mfg Systems Engineer Jan 2019 - June 2020
 - Ensured 99.95% uptime of critical applications in a 24x7x365 environment by utilizing a comprehensive monitoring strategy in Splunk to automate detection and trigger response to incidents and outages. Reduced MTTR where automation was not possible by providing effective runbooks to Level 1 Support.
 - Developed, tested, and implemented a Java application to eliminate repetitive data entry tasks that saves \$9k worth of labor hours annually. Used Hibernate to interact with Oracle DB and Selenium libraries for automation where API access was not possible. Packaged the app using Maven & Docker and created a CI/CD pipeline to execute testing and deployment using Jenkins.
- AMHS Factory Automation Engineer Jan 2018 - Dec 2018
 - Helped the company save \$36k worth of labor-hours per year by replacing manual production control practices with an automated Qlikview report.
- AMHS Co-op Engineer May 2017 - Dec 2017
 - Constructed complex SQL queries to extract, compile and visualize tool information in Qlikview.
- **Geodis SCO** Poughkeepsie, NY
Data Analyst Intern May 2016 - Dec 2016
 - Created a PHP based application to monitor employee training, including an integration with the Youtube API to control the page navigation.
 - Developed session and data-based Training Matrix tool using PHP, jQuery, and d3js to capture employee training performance with pending approval notifications, and automatic monthly report generation.

PROJECTS

- Raspberry Pi based highly-available Kubernetes cluster; deployed the hard way using only Ansible. Inspired by Kelsey Hightower. I created Roles for provisioning certs and bootstrapping cluster components including a highly-available control plane and etcd.
- Self updating GitHub README; created using Python and GitHub Actions. I wrote a custom Python module 'write2list' to convert a Tuple to a List for self-learning purposes.