gdhuper@gmail.com
408.912.3437

Gurpreet Singh

GITHUB.COM/GDHUPER
C#, Python, Rust, Go

Experience

Microsoft
August 2018- Present

Software Engineer II
Designed and implemented an ETL framework for cooking Visual Studio telemetry into actionable datasets
- Implemented a framework to cook raw telemetry using a config driven model allowing developers to quickly build data pipelines and pinpoint performance issues in Visual Studio

Designed and implemented various services/tools to strengthen the security posture of Azure and Windows
- Implemented distributed tracing for a fuzzing platform using the [OpenTelemetry](#) model; improved platform observability and enhanced developer debugging experience through structured logging
- Re-architected an internal PKI service used for monitoring certificate transparency logs to a serverless model; streamlined release process through automation allowing for faster deployment; improved security posture and resiliency through integrating functional tests in the CI/CD pipeline
- Developed static code analysis automation to flag credentials in source code in over 500+ critical services; successfully identified and fixed over 3000+ bugs

Proofpoint
February 2018- May 2018

Software Engineer (Intern)
Implemented UI features for a secure email client web application and improved code quality by automating tests
- Implemented a carousel in React with dynamic ordering capabilities allowing users to organize graphs based on their preferences
- Automated testing for a React web app using Jest and Enzyme; increasing code coverage by 65%

Cisco System, Inc.
June 2016 – Sept 2016

Software Engineer (Intern)
Improved code quality and uncovered performance issues by automating testing suites
- Automated database inventory snapshot report validation by implementing test suites using Junit framework; reduced manual testing effort by 75%

Open-Source Contributions

For more contributions:
[github.com/gdhuper](#)

[microsoft/onefuzz](#): **Rust, Python**
- Implemented multi-tenant authentication to support deployment in multi-tenant environments

[dapr/cli](#): **Go, Kubernetes, Helm**
- Improved developer experience by implementing `dapr dashboard` cli command to automatically spin up and launch dapr-dashboard in Kubernetes cluster

[kubernetes-sigs/capz:](#) **Go, Kubernetes**
- Extended data disk capabilities to support managed disk option

[nushell](#): **Rust**
- Extended nushell's math operations to support product of numbers

[dapr/rust-sdk](#): **Rust, gRPC, Protobuf**
- Implemented convenient layer in rust-sdk to interact with dapr runtime using gRPC protocol

Leadership & Skills

Technology
- **Languages**: C#, Python, Rust, Go, TypeScript
- **Cloud**: Docker, Kubernetes, Helm, Azure (Functions, Container Instances, AKS, CosmosDB, AAD), Terraform, GCP App Engine, Azure Service Bus
- **Databases**: MySQL, MongoDB, AzureSQL Redis, PostgreSQL, RabbitMQ
- **Other:** Linux, Proxmox, PowerShell, React (Typescript), REST, gRPC, AWS Lambda, EC2

Education

San Jose State University

B.S. Computer Science   **May 2018**
Dean's Honor List – Magna Cum Laude