Understanding, Detecting and Localizing Partial Failures in Large System Software¹

October 14, 2020

¹Chang Lou, Peng Huang, and Scott Smith. "Understanding, Detecting and Localizing Partial Failures in Large System Software". In: 17th {USENIX} Symposium on Networked Systems Design and Implementation ({NSDI} 20). 2020, pp. 559–574.

Overview

Problem definition

What is a Partial Failure?

Definition

A partial failure is, in a process π to be when a fault **does not** crash π but causes safety or liveness violation or severe slowness for some functionality $R_f \subsetneq R$