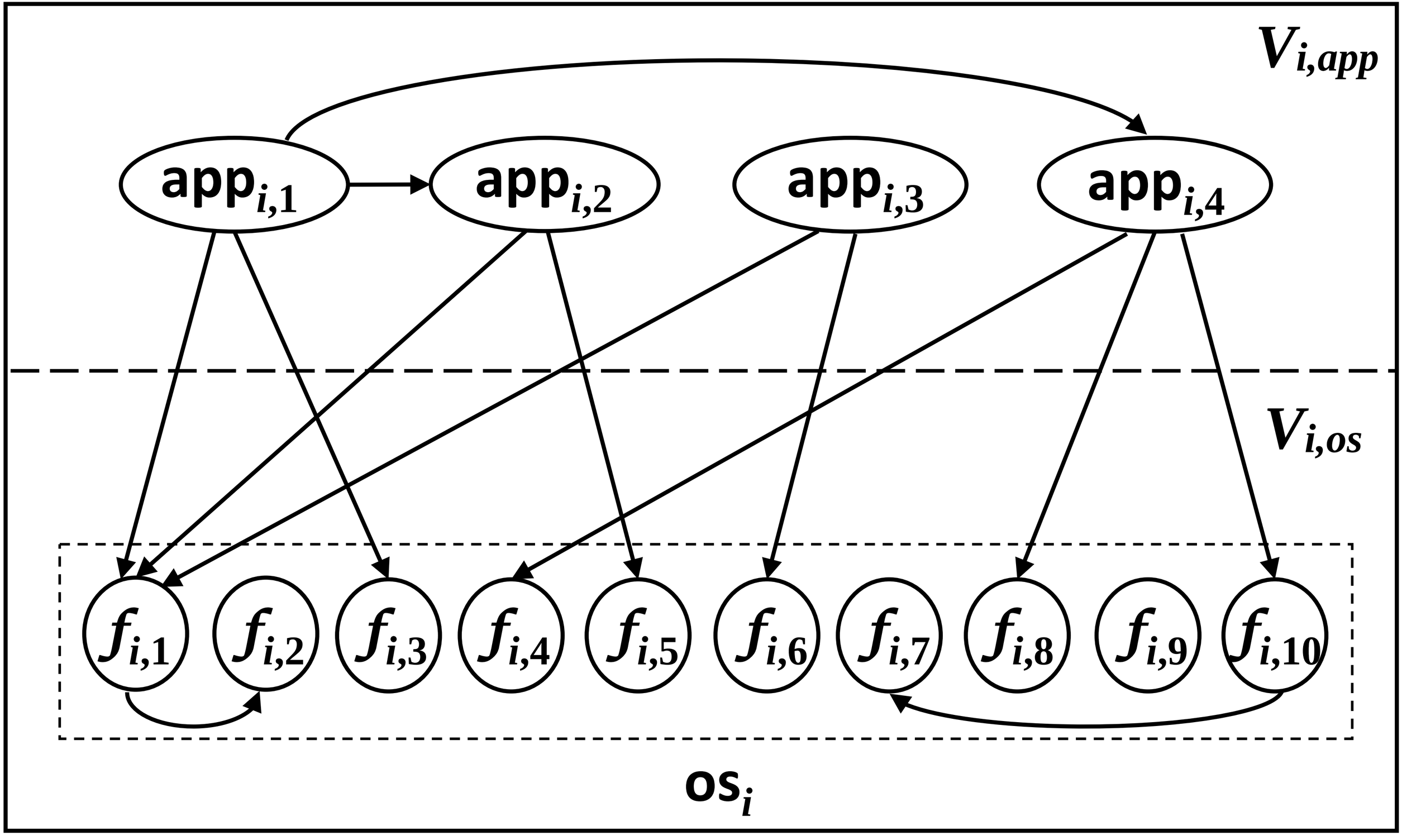
$V_{i,app}$
$app_{i,1}$
$app_{i,2}$
$app_{i,3}$
$app_{i,4}$
$V_{i,os}$
$f_{i,1}$
$f_{i,2}$
$f_{i,3}$
$f_{i,4}$
$f_{i,5}$
$f_{i,6}$
$f_{i,7}$
$f_{i,8}$
$f_{i,9}$
$f_{i,10}$
$os_i$