

# BST Application

kd-Tree: Query

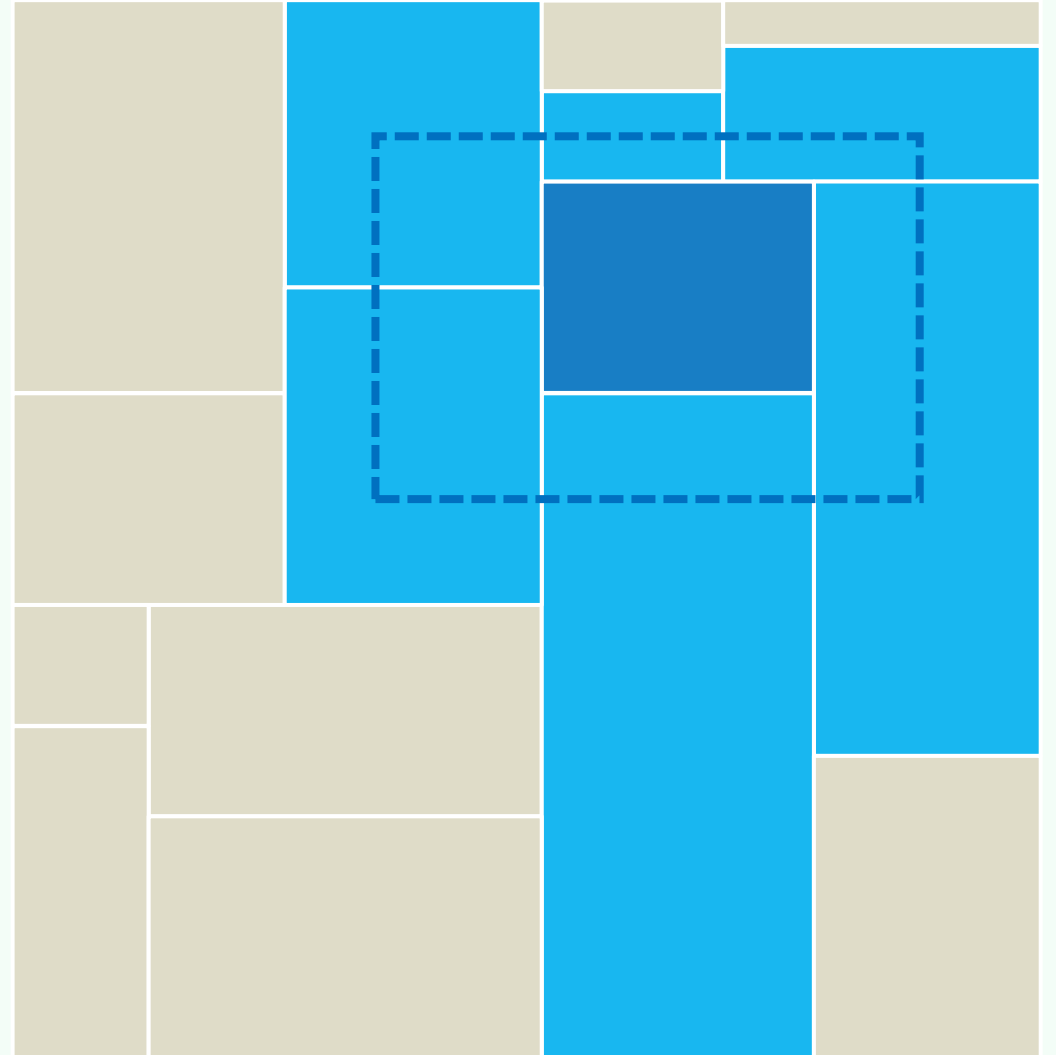
09-B5

邓俊辉

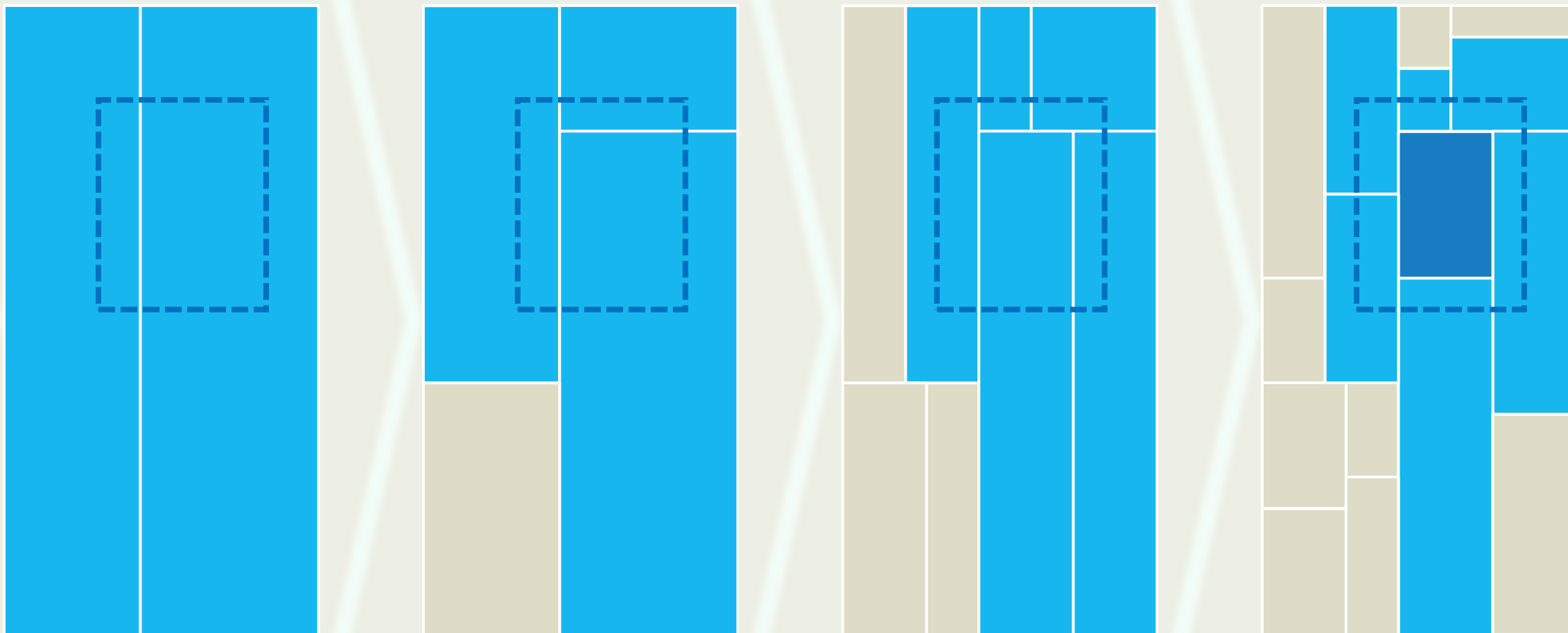
deng@tsinghua.edu.cn

## kdSearch(v, R)

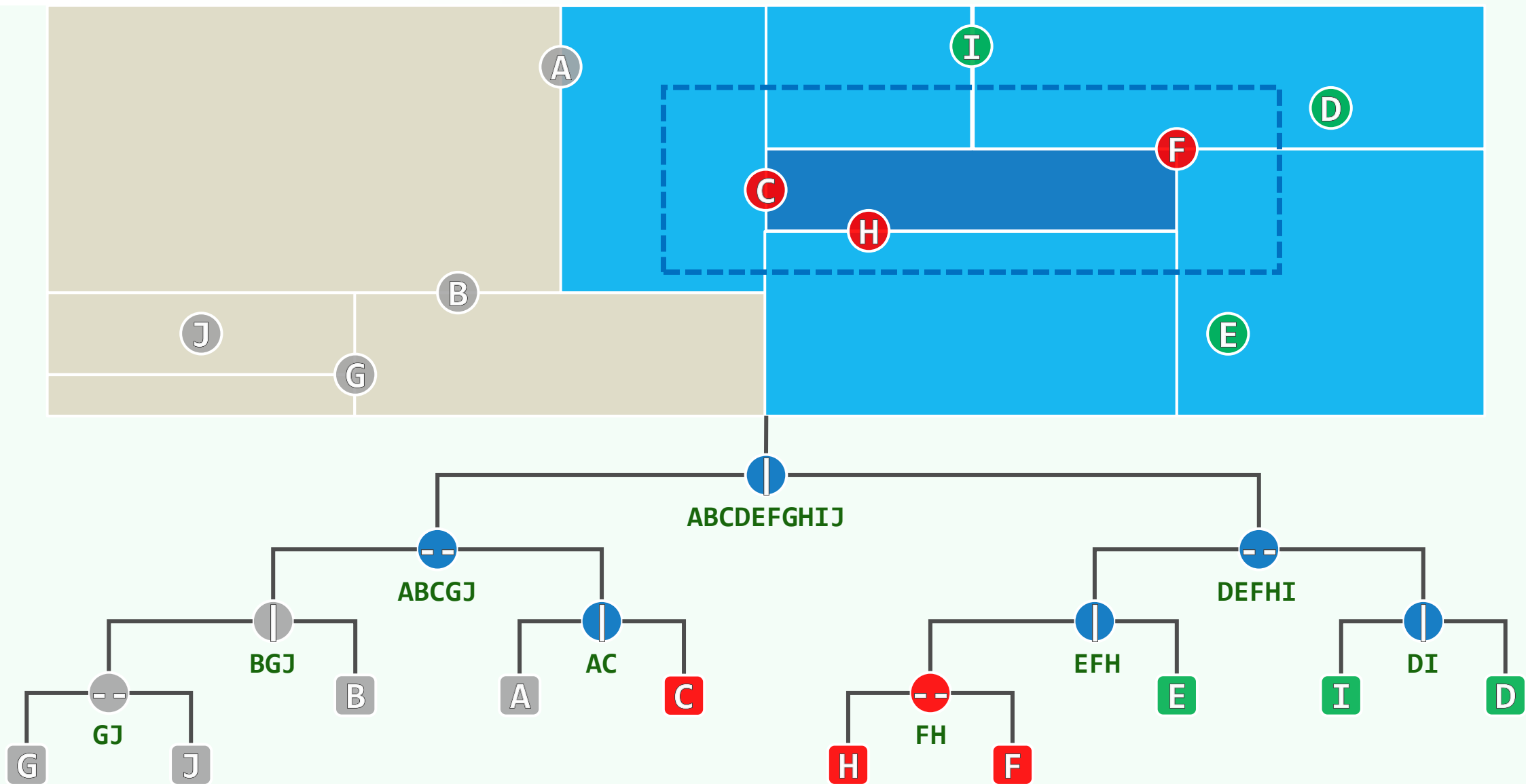
```
❖ if ( isLeaf( v ) )
    if ( inside( v, R ) ) report(v)
    return
❖ if ( region( v->lc )  $\subseteq$  R )
    reportSubtree( v->lc )
    else if ( region( v->lc )  $\cap$  R  $\neq \emptyset$  )
        kdSearch( v->lc, R )
❖ if ( region( v->rc )  $\subseteq$  R )
    reportSubtree( v->rc )
    else if ( region( v->rc )  $\cap$  R  $\neq \emptyset$  )
        kdSearch( v->rc, R )
```



# Example



# Example



# Bounding Box

