## QUEUEING THEORY


λ = arrival rate
μ = service rate

## GAME THEORY

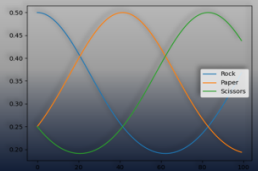
$$A = \begin{bmatrix} 0 & -1 & 1 \\ 1 & 0 & -1 \\ -1 & 1 & 0 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 1 & -1 \\ -1 & 0 & 1 \\ 1 & -1 & 0 \end{bmatrix}$$

Nash Equilibrium

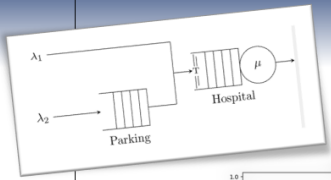
$$\sigma_A = \left(\frac{1}{3}, \frac{1}{3}, \frac{1}{3}\right)$$

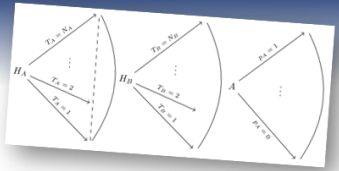
$$\sigma_B = \left(\frac{1}{3}, \frac{1}{3}, \frac{1}{3}\right)$$

Learning Algorithm

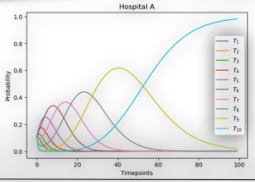



## MY RESEARCH

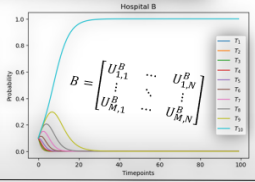



$$A = \begin{bmatrix} U^A_{1,1} & \cdots & U^A_{1,N} \\ \vdots & \ddots & \vdots \\ U^A_{M,1} & \cdots & U^A_{M,N} \end{bmatrix}$$




$$B = \begin{bmatrix} U^B_{1,1} & \cdots & U^B_{1,N} \\ \vdots & \ddots & \vdots \\ U^B_{M,1} & \cdots & U^B_{M,N} \end{bmatrix}$$

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# WORKFORCE BEHAVIOURS IN HEALTHCARE SYSTEMS

Michalis Panayides