Embedded Signal Processing Laboratory

The University of Texas at Austin
WHAT STARTS HERE CHANGES THE WORLD

Wireless Networking & Communications Group

ESPL — Embedded Signal Processing Laboratory — The University of Texas at Austin

Ecosystem of **ESPL**

Design of Reliable Systems

Hugo

electronic design automation
patterns of reliability for highly parallel systems

Junmo   Jinseok

communication systems
millimeter wave, low-resolution ADCs

Prof. Evans

Scott

machine learning
detection in low SNR environments

Base station design

Analog combiner

$\mathbf{W}_{\mathrm{RF}_1}^{\star}$ $\mathbf{W}_{\mathrm{RF}_2}^{\star}$

Smart grid system

Smart Grid

Yunseong   Faris

wireless networks
massive MIMO, machine learning

Automated network tuning

States $\mathcal{S}$

s_1
s_2
s_3
s_4
s_m

$\theta_{1,1}$ $\theta_{1,2}$
$\theta_{2,1}$ $\theta_{2,2}$
$\theta_{3,1}$ $\theta_{3,2}$
$\theta_{H,1}$ $\theta_{H,2}$

$Q^{*}(s, a_1)$
$Q^{*}(s, a_n)$

Outputs

Hidden layers Θ