# **EDUCATION**

### **BITS PILANI** | B.E. IN ELECTRONICS AND INSTRUMENTATION

Aug 2016 - May 2020 | RJ, India

## **EXPERIENCE**

### XILINX RESEARCH | RESEARCH INTERN

Aug 2019 - Jan 2020 | Dublin, Ireland

• To optimize variants of Quantized Neural Networks on Xilinx FPGAs and Co-designing Deep Neural Networks and Reconfigurable Hardware

### **URANIOM** | RESEARCH INTERN

Jan 2019 - Present | France (Remote)

• Working on neural network weight-sharing strategies, semantic segmentation models for face transfer across GIFs and porting TF models to TensorRT to generate high-performance run-time engines for deployment.

### **WOLFRAM** | Undergraduate Researcher

June 2018 - July 2018 | Waltham, Massachusetts

• Developed HadaNet MLPs in the Wolfram Language and worked on optimized C OpenMP kernels for GEMM and Convolutions using the Hadamard Binarization methodology. [OpenMP kernel] | [CUDA kernel] | [Whitepaper]

## PUBLICATIONS & GRANTS

HADANETS: FLEXIBLE QUANTIZATION STRATEGIES FOR NEURAL NETWORKS [Link] CALIFORNIA | JUN 2019 Paper accepted at CVPR'19 UAVision workshop - Orals.

Delivering a "Theatre Talk" and poster at the Intel Demo Booth at CVPR'19.

### Wolfram Technology Conference - Speaker

CHAMPAIGN, IL | OCT. 2018

Delievered a talk on my research on Hadamard Neural Networks.

### INTEL AI MEETUP - SPEAKER [PPTX]

DELHI, IN | SEPT. 2018

Spoke about my research on scaling Al using Intel techonologies. This event was organized by Intel.

#### INTEL AI ACADEMY SUCCESS STORY [LINK]

Intel published a cover story of my research done in the field of Quantized Neural Networks.

#### INTEL AI DEVCON - POSTER

SAN FRANCISCO, BANGALORE | MAY & AUG 2018

Presented posters on quantized GEMM kernels for Intel Xeon Phi

#### INTEL NERVANA EARLY INNOVATORS GRANT

\$5000

Received research grant to develop Binary Precision Neural Networks and Real time Artistic Style Transfer. The technical article can be found [here.] The code can be found [here.]

#### INTEL CVPR TRAVEL GRANT

\$2500

Received a travel grant from Intel to present at the Intel Demo Booth at CVPR'19.

#### WOLFRAM STUDENT AID

\$2400

Received aid to attend the Wolfram Summer School and develop Hadamard Binary Neural Networks.

#### **KVPY Scholar**

Selected as a KVPY scholar by the Department of Science and Technology, Government of India.