

# Puming Fang

pfang@umass.edu | 760 Riverglade Dr, Amherst, 01002 MA | +1(413) 800-2199

## EDUCATION

<b>UMass Amherst, <i>Amherst, USA</i></b>	9/2017 – Present
<ul style="list-style-type: none"><li>• Ph.D. of Electrical and Computer Engineering</li><li>• Advisor: Prof. Tilman Wolf</li></ul>	
<b>Technical University of Munich, <i>Munich, Germany</i></b>	10/2014 – 08/2017
<ul style="list-style-type: none"><li>• Master of Electrical and Computer Engineering</li><li>• Advisor: Prof. Thomas Eibert</li></ul>	
<b>Xidian University, <i>Xi'an, China</i></b>	08/2010 – 07/2014
<ul style="list-style-type: none"><li>• Bachelor of Electrical and Computer Engineering</li></ul>	

## PUBLICATION

- Enabling Virtual Network Functions in Named Data Networking, Puming Fang, Tilman Wolf. IEEE INFOCOM WKSHPS: GI 2021.
- Radiation Pattern Reconfigurable Antenna for MIMO Systems with Antenna Tuning Switches, P. Fang, K. Wang, M. Wolfmüller, T. Eibert. IEEE AP-S/URSI, 2018.

## RESEARCH EXPERIENCE

<b>Research Assistant, UMass Amherst, <i>Amherst</i></b>	01/2021 – Present
Project: A Deep Learning-Based Framework for Content Caching	
<i>Advisor: Prof. Tilman Wolf</i>	

- Proposed a novel framework based on deep recurrent neural network models for content caching
- Implemented a simulator and prototype within Apache Traffic Server

<b>Research Assistant, UMass Amherst, <i>Amherst</i></b>	03/2020 – 12/2020
Project: Enabling Virtual Network Functions in Named Data Network (NDN)	
<i>Advisor: Prof. Tilman Wolf</i>	

- Proposed an approach that uses modifications to names in data requests to invoke network functions in NDN
- Introduced three different approaches on how to invoke network functions in NDN, which include explicit invocation by the end-system and transparent invocation by intermediate nodes.
- Performed evaluation results that show the performance of proposed approaches

<b>Research Assistant, Infineon Technologies, <i>Munich</i></b>	01/2017 – 08/2017
Project: Mobile Phone Antenna Radiation Pattern Reconfiguration for 4X4 MIMO Systems with Antenna Tuning Switches	

- Designed and simulated mobile phone antennas
- Implemented antenna tuning devices to obtain radiation pattern reconfiguration
- Investigated the benefits brought into 4x4 MIMO mobile communications by pattern reconfiguration

## TEACHING EXPERIENCE

<b>Teaching Assistant, UMass Amherst, <i>Amherst</i></b>	01/2020 – Present
<ul style="list-style-type: none"><li>• ECE 697 Machine Learning (2021 Spring)</li><li>• ECE 671 Computer Networks (2020 Fall)</li></ul>	
<b>Teaching Assistant, Technical University of Munich, <i>Munich</i></b>	10/2014 – 01/2015
<ul style="list-style-type: none"><li>• Neural Networks (2014 Fall)</li></ul>	

## SKILLS

- **Programming:** Expert in Python; Skillful with Java and C++.
- **Language:** Native in Mandarin; Fluent in English; Conversational in German.