

SON PHAM

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EDUCATION

University of Waterloo - Canada

May 2023 - Aug 2024

M. Eng in Electrical and Computer Engineering – Specialize in ML & AI

California State University, San Diego (SDSU) - United States

Dec 2019

B.S. in Electrical Engineering & Minor in Computer Science

EXPERIENCE

Software Engineer @DEK Technologies (Full Time)

Dec 2022 – Feb 2023

- Involvement in developing Session Border Gateway (SBG) by setting up the environments for testing (VMWare, OpenStack, Kubernetes), config yaml files, working on k9s, Rancher.
- Have a basic understanding of Gerrit, SIP, Diameter, h248, IMS, SBG

Wireless Test Engineer @SGS North America (Full Time)

Sep 2021 – Oct 2022

- Perform 5G NR (SA, NSA) test on Keysight, and Anritsu systems. Create script to control ESPEC temp chamber.

Field Test Engineer @Samsung Electronics America (Contract)

Nov 2020 – July 2021

- Perform 4G/LTE, 5G (SA, NSA) Field Interoperability Testing (FIT) includes E911, 4G, 5G Data Throughput, Drive tests, Call tests, VoLTE Features, 5G Features, Handover.
- Analyze logs with QCAT, QXDM and Wireshark.
- Understanding basic aspects of SUPL, LPP, IMS architectures, RRC, NAS layer.
- Develop batch, adb scripts, and Notepad++ macros to automate testing procedures.

Test Engineer @SGS North America (Contract)

May 2020 – Sep 2020

- Performed protocol tests include RF, AT commands, Emergency, Handover, and Data Tput.
- Ran scripts on R&S CMW500, Anite, Anritsu. Developed a batch script to automate the calling process.

Web Developer @ Bilingual Development Lab (SDSU)

Mar 2020 – Dec 2020

- Setting up WordPress site. Modified themes and developed a dashboard for pathologists to add/remove/enter surveys with PHP, MySQL, and Bootstrap.
- Used both SQL and Google Spreadsheet to store data. Demo: <https://vietslp.sdsu.edu>

Research Assistant @ Smart Grid Lab (SDSU)

Mar 2019 - Dec 2019

- Designed a solar irradiance tracking device that could send signals over long distance (1-2 miles).
- Demo: <https://smartgrid.sdsu.edu/>, paper: https://bit.ly/sonpham_paper

Research Assistant @ Biomechanics Lab (SDSU)

Jun 2019 - Dec 2019

- Developed a portable device to track muscle stiffness and measure EMG simultaneously using ultrasound.
- Reduced the noise source from the sensor. Optimized Matlab code and used Matlab to control Arduino.

PROJECTS

Senior project: Vehicle tracking device

2018-2019

- Designed a device to track and display current traffic on a certain road.

Personal project: Predict company responses based on complaints (Python)

2019

- Using panda to clean data, then apply the decision tree method (scikit-learn) to predict the response from different financial companies.

SKILLS & EXPERTISE

Programming Languages

Shell script, Erlang (Basic) C/C++, Java (Intermediate)
Python (Intermediate) HTML/CSS, PHP, Query, JS (Intermediate+)

Hardware

Raspberry Pi 3, Arduino, AVR, SDR (software-defined radio),

Tools

3D printer, QXDP, QPTS, adb