

# Cat Le

## Electrical Engineer

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### EDUCATION

2016 - 2017 **California Institute of Technology**  
M.S. Electrical Engineering  
GPA: 4.00

2014 - 2016 **Rutgers University–New Brunswick**  
B.S. Electrical/Computer Engineering  
GPA: 4.00

2012 - 2014 **Vietnam National University–HCM**  
B.S. Electrical Engineering  
GPA: 91.7/100

### WORK EXPERIENCE

Jul 2017 - Present **System Engineer**  
Vigilant Solutions, Livermore CA  
Developing OCR algorithm, designing LPR and facial recognition cameras.

Aug 2015 - May 2016 **Research Assistant**  
Rutgers University, Piscataway NJ  
Researching on Cloud-Radio Access Network under REU Funding of NSF.

May 2015 - Aug 2015 **Engineering Intern**  
WINLAB, North Brunswick NJ  
Developing LTE eNB and UE using USRP B210 and OpenAirInterface.

### RESEARCH AND HONOR

**Salieri Venture Design** - Real-time musical note detector (FPGA, FFT) that helps users learn music by ear and play it flawlessly.

**On-chip qPCR** – Integrated real-time PCR (CCD, LabVIEW) that amplifies and generates thousands of copies of a DNA segment.

**Sign Language Translator** - JPL Sleeve is used to read the signal from 20 muscles on the human's hand and map it into alphabet.

**Vision-based Self-Driving Car** - Anonymous car (Raspberry Pi, OpenCV) responds to traffic lights, stop signs, and pedestrians.

**Cloud-Radio Access Network** - 2 LTE base stations (URSP) automatically allocate resources based on the users' demand.

**Voice-Controlled Board Game** - MATLAB program, based on Viterbi algorithm, uses voice command to control chess pieces.

**Multiple-User Walkie-Talkie** - Each user is assigned to specific AM/FM channels, with transmission latency less than 1 second.

**Runner-up**  
2016 Caltech Technopreneurship

**Nikola Tesla Scholar**  
Columbia University

**Summa Cum Laude**  
Rutgers University

**Matthew Leydt Award**  
Rutgers University

**John B. Smith Award**  
Rutgers University

**Outstanding Engineering Scholar**  
Rutgers University

**E. M. Toomey Scholarship**  
Rutgers University

### SKILL

Python	★★★★★	SolidWorks	★★★★★
C/C++	★★★★★	OrCAD	★★★★★
Java	★★★★★	LabVIEW	★★★★★
MATLAB	★★★★★	Arduino	★★★★★
Maple	★★★★★	Raspberry Pi	★★★★★
Mathematica	★★★★★	Linux	★★★★★

### ACTIVITY

**Tau Beta Pi**  
Academic Outreach

**Eta Kappa Nu**  
Treasurer

**Sigma Alpha Pi**  
Member

**Caltech Y**  
Volunteer

**Rutgers SPIE**  
Representative

**Rutgers Rotaract**  
Coordinator