

# XIAOKE WANG

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## EDUCATION

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### Ghent University

Sept. 2021 - Present

MSc in Electrical Engineering, Electronics Circuits and System (ECS)

*Thesis:* Routing in a Photonic Integrated Circuit *Promoter:* Prof. Dirk Stroobands & Prof. Wim Bogaerts

### Northwestern Polytechnical University

2017-2021

BSc in Microelectronics

### Ecole Centrale de Nantes

2020-2021

Foundation Master(non-degree exchange) in Control Robotics & Signal

*Graduation Project:* Electromyography-based mouse pointer control with Python

## TOOLS & SKILLS

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**Programming Languages** Python, R, Matlab, C, Verilog/VHDL

**EE Tools & Skills** IC Layout Design(Cadence Virtuoso), PCB Design(KiCAD),  
High frequency Analysis(ADS), Robot Control(ROS),  
Circuit Analysis(LTspice), Antenna Design(CST)  
Digital Circuits Design(Vivado/Quartus)

**Tools** LaTeX, Git, Bash/Shell

## PROJECT & EXPERIENCE

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### CSL & PRG, Ghent University

Oct. 2022 - now

*Master Thesis: Routing in a Photonic Integrated Circuit*

- A connection-based routing algorithm applied on hexagonal programmable photonics circuits especially focused on one source multiple sinks application.
- A multiple destinations expansion of an integer programming-based router from single source single destinations.

### INSTITUTE OF FLEXIBLE ELECTRONICS, NPU

Sept. 2019 - Dec. 2020

*Research Assistant*

- Designed a dynamic adaptive learning particle swarm optimizer combined with 5 conventional PSO (particle swarm optimization) strategies which performed better on benchmark functions and have flexibility on different application scenarios with several exclusive parameters(sub-swarm size/ number of sub-swarms...).

### The University of British Columbia

Jul. 2019 - Aug. 2019

*Summer Program*

- Communication Systems: Technology Embedded in Daily life.
- Introduction to Digital Systems Design with FPGAs.

## AWARDS

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- Excellent Students Scholarship of Northwestern Polytechnical University Oct. 2020
- “Yajun Wu” Third Prize Scholarship. Oct. 2020
- Excellent Students Scholarship of School of Microelectronics, NPU Oct. 2019

## LANGUAGES

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Chinese, English, French(un peu)