

# Arthur C. Tsoi

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Recent college graduate with a strong background in Physics, two years of nano fabrication experience in an interdisciplinary research environment, proven record working and communicating with diverse groups of people, seeking to launch a career in the development and advancement of semiconductor nano technology.

## SKILLS

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- Nano device fabrication processes
- CAD pattern design
- Atomic force microscopy
- Laser characterization and optical experiments
- Process control and optimization
- Technical reports and documentation using MS Office and LaTeX
- Data analysis using MS Excel and Matlab
- Ability to work in a cleanroom
- Ability to work independently in a collaborative environment
- Quick to develop new skills
- Training and coaching
- Strong interpersonal and communication skills
- Languages: fluent Cantonese, proficient Mandarin and French

## EDUCATION

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**Columbia University, Columbia College**, New York, NY                      September 2008 – May 2012  
Bachelor of Arts in Physics, GPA 3.8, Cum Laude

## EXPERIENCE

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**PolarOnyx, Inc**, San Jose, CA    September 2012 – January 2013  
*Optical Engineer*

- Gained in 2 months hands-on knowledge of laser characterization methods, including beam profile and pulse duration measurements, to test, diagnose, and optimize laser performance
- Designed and implemented optical experiments, prepared user manuals and repair reports

**Physics Department, Columbia University**, New York, NY                      February 2010 – May 2012  
*Research Assistant*

- Learned within 3 months, then gained 2 years of hands-on experience of CAD pattern design and device fabrication processes, including lithography, deposition and plasma etch processes
- Acknowledged in a research paper published in *Nature Physics*, a top-tier, peer-reviewed publication in Physics, for help with device fabrication

**Five Points Learning**, New York, NY    September 2011 – May 2012  
*Private Tutor in Math and Physics*

- Successfully engaged and tutored over 20 students of different backgrounds
- Established goals and understood individual needs of parents and students

**Columbia Catholic Ministry**, New York, NY    September 2010 – May 2012  
*Executive Board Member*

- Assumed responsibilities of former ministry director to ensure continuity of functions by organizing and planning events, recruiting volunteers, producing information booklets
- Awarded *King's Crown Leadership Award* in recognition of exemplary commitment to campus community through outstanding leadership