

Justin Yirka
Curriculum Vitae
B.S. in Computer Science and B.S. in Mathematics
Virginia Commonwealth University, Richmond, VA, USA

YirkaJk@vcu.edu
(703) 229-7956
www.linkedin.com/in/yirkajk

Research Interests

Quantum computing, algorithms, complexity theory

Education

Virginia Commonwealth University (VCU)

B.S. in Computer Science, GPA: 3.98 / 4.0

Richmond, VA

(Dual degree program) 2018

B.S. in Mathematical Sciences

Concentration in Pure Math Specialization in Data Science
Minor in Physics
University Honors

Research

Experience.....

Graph Theory Computational Discovery Lab, VCU

Research Assistant

Summer 2018

Supervisor: Craig Larson, Ph.D.

Topic: Use of automated conjecturing software to find conditions for graph hamiltonicity.

Joint Center for Quantum Information and Computer Science (QUCIS), University of Maryland (UMD)

NSF REU Undergraduate Researcher

Summer 2017

Supervisor: Andrew Childs, Ph.D.

Topic: Quantum tomography. Pure-state tomography with Pauli observables.

Support: NSF Research Experience for Undergraduates (REU) CAAR. PI: William Gasarch, Ph.D.

Quantum Computing Lab, VCU

Undergraduate Research Assistant

2015–2016

Supervisor: Sevag Gharibian, Ph.D.

Topics: Quantum computational complexity, complexity of local measurements, quantum oracle classes
(e.g. $P^{QMA[\log]}$), quantum variants of the polynomial hierarchy.

Scholarships (all dollar amounts in USD)

Presidential Scholarship

\$110,000, Virginia Commonwealth University

2014–2018

Top scholarship offered. Full cost of 4-year tuition, room, and board.

Awarded to 0.6% of students

Presidential Scholarship [unable to accept]

\$80,000, Worcester Polytechnic Institute

2014

Rensselaer Medal Merit Scholarship [unable to accept]

\$100,000, Rensselaer Polytechnic Institute

2014

Funding

Event grants for RamDev seminar series

\$1,900, VCU Student Government Association

2016–2018

Travel grant for presentation at QIP 2017

\$500, VCU Honors College

2017

Travel grant for presentation at NCUR 2016

\$550, VCU Honors College

2016

Awards and Honors

Pure Mathematics Award

VCU College of Humanities and Sciences

2018

Awarded to student in pure mathematics concentration with highest graduating GPA.

Mark A. Sternheimer Capstone Design Award

VCU School of Engineering

2017

For “innovation and entrepreneurship” of senior project developing mobile app.

Included grant of \$660.

University Student Scholar Award

Virginia Commonwealth University

2015

Launch Award for Outstanding Research Poster

VCU Symposium for Undergraduate Research and Creativity

2015

For poster “Evaluation of TCP header fields for data overhead efficiency”.

Volunteer of the Year

Grade-school robotics program, Prince William County Schools, VA

2014

Master thesis

title: Title

supervisors: Supervisors

description: Short thesis abstract

Experience

Vocational.....

Employer

Job title

City

year–year

General description no longer than 1–2 lines.

Detailed achievements:

- Achievement 1;
- Achievement 2, with sub-achievements:
 - Sub-achievement (a);
 - Sub-achievement (b), with sub-sub-achievements (don't do this!);
 - Sub-sub-achievement i;
 - Sub-sub-achievement ii;
 - Sub-sub-achievement iii;
 - Sub-achievement (c);
- Achievement 3.

Employer

Job title

City

year–year

Description line 1

Description line 2

Miscellaneous.....

Employer

Job title

City

year–year

Description

Languages

Language 1: Skill level

Comment

Language 2: Skill level

Comment

Language 3: Skill level

Comment

Computer skills

category 1: XXX, YYY, ZZZ

category 4: XXX, YYY, ZZZ

category 2: XXX, YYY, ZZZ

category 5: XXX, YYY, ZZZ

category 3: XXX, YYY, ZZZ

category 6: XXX, YYY, ZZZ

Interests

hobby 1: Description

hobby 2: Description

hobby 3: Description

Extra 1

o Item 1

o Item 2

o Item 3. This item is particularly long and therefore normally spans over several lines. Did you notice the indentation when the line wraps?

Extra 2

o Item 1

o Item 2

o Item 3

o Item 4

o Item 5

o Item 6. Like item 3 in the single column list before, this item is particularly long to wrap over several lines.

References

Category 1

- o Person 1
- o Person 2
- o Person 3

Category 2

Amongst others:

- o Person 1, and
 - o Person 2
- (more upon request)

All the rest & some more

That person, and **those** also (all available upon request).