

Ryan T Gibb

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EDUCATION

UNIVERSITY OF ST ANDREWS 2017 - 2021

BSC HONS COMPUTER SCIENCE

- Dissertation: 'Ubiquitous Communication for the Internet of Things'. [↗](#)
- 1st Class Honours.
- John Honey Prize. 2020

Best student in the Junior Honours (3rd) year.

- Christopher Strachey Prize. 2019
Best student in the core module of data structures and algorithms.
- Dean's List Award for exemplary academic achievement in every year.

NORTH BERWICK HIGH SCHOOL 2011 - 2017

- School prize for highest achievement in AH Maths, AH Computing Science, Higher Maths, and Higher Computing Science.

WORK EXPERIENCE

CISCO June - Present

SOFTWARE ENGINEER INTERN

- Working on [Cisco Defense Orchestrator](#).

UNIVERSITY OF ST. ANDREWS [↗](#) Jun - Aug 2020

UNDERGRADUATE RESEARCH ASSISTANT

- Designed, implemented, and benchmarked multi-core and cache efficient algorithms for high degree permutations in C and Rust.
- Resulted in a 64% faster parallelised algorithm for degrees of 2^{32} .

JP MORGAN CHASE & CO. Jun - Aug 2019 (10 weeks)

SOFTWARE ENGINEER INTERN

- Created a Message Recovery Service for an OTC Derivatives System.
- Used Spring, React, and Typescript; deployed on Cloud Foundry.
- Resulted in trade status update auditability and saved developer time.

POSITIONS OF LEADERSHIP

SCHOOL PRESIDENT Jul 2020 - Jul 2021

As president of the School of Computer Science: representing the student body; ran a remote orientation week collaborating with the school and student societies; created a school-wide mentorship scheme with over 200 participants, and line managing 11 class reps.

STACS TREASURER May 2019 - May 2020

Responsible for St. Andrews Computing Society's finances (approximately £15k); communicating with sponsors; and organising events, including 2 hackathons called Hack the Bubble and StacsHack.

CLASS REP Sep 2018 - May 2019

Represented my 2nd year class to solve problems in collaboration with the faculty and school president, as well as organising year wide social events.

SKILLS

- Computer Systems
Distributed Systems
Operating Systems
Networking
- Communication
Teamwork
Leadership
- Unix Shell, Git, Vim.
- Data structures and algorithms.
- Agile, Scrum, JIRA, Jenkins.
- C, Python, Java, SQL, Rust, Node.js, Haskell, C#, \LaTeX , Javascript (Node.js, React.js).

COMPETITIONS

STACSHACK V [↗](#) [👤](#) 2019

- Created a tweet guessing web game 'Twitcher' in 24 hours.
- Won American Express's 'icebreaker challenge'.

HACK THE BURGH V [↗](#) 2019

- Created a text-to-speech and speech-to-text web app phone system 'HearMe' for the hearing-impaired in 24 hours.
- Won JP Morgan's 'empowering minority entrepreneurs' award.

PROJECTS

COLOUR SPACE COMPRESSION Java [↗](#)

Uses the K-means clustering algorithm to compress the number of colours in an image.

IMAGE STEGANOGRAPHY Python [↗](#)

Hides data (plaintext, images, or other files) in the least significant RGB bits of pixels in an image.

REFERENCES

Available on request.