TONY (JUNJING) FAN

Full-Stack Web Developer & Physics Specialist Graduate & Astrophysics Researcher

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EDUCATIONAL BACKGROUND

Coding Boot Camp Full Time Live Course on Web Developing
University of Toronto, School of Graduate Studies

📅 May 2022 – Aug 2022   📍 Toronto, Canada

- A rigorous and fast-paced coding boot camp that teaches the practical, technical skills that enable me to build robust web applications.
- Topics include **GITHUB**, **HTML/CSS** and **JAVASCRIPT**, with technologies such as **MERN** stack (MongoDB, Express, React JS, Node JS), jQuery, mySQL, GraphQL and etc.
- **CLICK HERE TO VIEW MY PORTFOLIO/WEBSITE.**
- Finished with a grade of 98%. **CLICK HERE TO VIEW THE CERTIFICATE.**

Physics Specialist Program/Honours Bachelor of Science with **High Distinction**
University of Toronto, Physics

📅 Sep 2016 – Dec 2020   📍 Toronto, Canada

- Besides being well versed in **MATHEMATICS**, I have a working understanding of **ADVANCED PHYSICS**, especially in topics such as Classical Mechanics, Quantum Mechanics, Thermal Dynamics, Particle Physics, Relativistic Mechanics, and Electrodynamics.
- I learned a wide set of **LABORATORY** and **CODING** skills through the physics laboratory courses, reading and following instructions, operating equipment, recording data, and Python coding skills for data organization and data analysis.
- With the collaborative lab projects with classmates, I developed strong communication and **TEAM-BUILDING** skills that benefit in settings where I have to work with others
- Through my hard work, I obtained a **3.82 cGPA**, and I won **DREW THOMPSON SCHOLARSHIPS** multiple times.
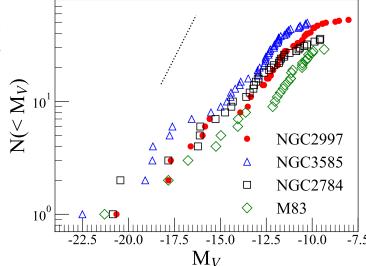
EXPERIENCE

AstroPhysics Researcher
University of Toronto, Astronomy & Astrophysics

📅 Aug 2019 – Present   📍 Toronto, Canada

- I have been working as the leading author/researcher of the paper Dwarf Galaxy Discoveries from the KMTNet Supernova Program III: Early Evolutionary Stage of the NGC 2997 Group as an assistant to my professor.
- My work involved visual identification of new dwarf galaxies using deep stacked images, conducting photometry using elliptical models, construction of surface brightness profiles for Sérsic fitting, group property data analysis such as radial number density distribution, radial color distribution, mass segregation test, color magnitude relation, luminosity function, interpretation of the dynamical state of the group, and comparison to other published results.
- Figure on the right shows an example of the said analyses. It is the luminosity function analysis showing the faint-end slopes of the galaxy groups (NGC 2784, NGC 3585, NGC 2997 and M83) being shallower than the theoretical prediction from the ΛCDM model.
- I conducted all my analyses with my own **PYTHON** codes, which involved a lot of **CODING** and **DATA ANALYSIS** skills. I learned and professionalized my **LaTeX** coding skills as well through this project.
- **Fan et al, submitting to MNRAS in Sept. 2022**, see below for the link to a copy of the paper.

Full-Stack App Developer/Marketing Assistant

CareToGo by Belair Care Medical Ltd.

📅 Oct 2021 – present   📍 Toronto, Canada

- **WORKING WITH A TEAM** of people in building two mobile applications for the CareToGo platform. Main responsibilities include application front-end coding using **REACT NATIVE** along with **EXPO**, assisting in bridging between front-end and back-end.
- Working with nurses and health care workers to recruit clients for the platform.
- Creating marketing/investment pitch purposed digital contents for attracting clients and investments.

Medical Sciences

Mount Sinai Hospital

📅 Aug 2015 – Jan 2016   📍 Toronto, Canada

- Worked in **PATHOLOGY LAB**, duties include sorting specimens from patients, preparing certain specimens in formalin for examination, assisting in autopsy of deceased patients, and recording data during autopsy.
- Also worked in kinesiology department, duties include sorting patient records, faxing documents, calling patients for appointments, and translating for some patients who don't speak English.

Business Assistant

HXM

📅 Jan 2016 – Aug 2016   📍 Shanghai, China

- Worked in the clothing production line of the company, where I assisted in packaging of produced clothes for shipping.
- Also worked in the office as the assistant to the legal representative of the company, duties include, bookkeeping cash flows, emailing clients and faxing documents, booking inspection sessions with customers.

ABOUT ME

🏆 **Courageous**
I had a lot of courage to come to Canada alone to pursue an academic career at the age of 15.

Persistent & Consistent
I have shown my persistence and consistency throughout my academic years, earning myself a cGPA of 3.82 in the Physics Specialist Program at the University of Toronto.

Patient and Detail Oriented
I am a very detail oriented worker, which requires a lot of patience. This applies not only to my academic career, but also to many other aspects of my life. I like to take my time and organize everything so that I don't miss out on any little details.

LANGUAGE AND SKILLS

Patient   Hard-Working

Detail Oriented   Active Listening

English	●●●●●
Mandarin	●●●●●

Python/Astropy	●●●●●
Data Analysis	●●●●●
LaTeX	●●●●●
React JS	●●●●●
HTML/CSS	●●●●●
MERN	●●●●○
REACT NATIVE	●●●●○
Laboratory Skills	●●●●○
Instruction Following	●●●●○

PUBLICATION

🐾 *Dwarf Galaxy Discoveries from the KMTNet Supernova Program III. Early Evolutionary Stage of the NGC 2997 Group*, **submitting to MNRAS: Click here to view a copy of the paper**

TONY JUNJING FAN, DAE-SIK MOON, HONG SOO PARK, DENNIS ZARITSKY, SANG CHUL KIM, YOUNGDAE LEE, TING LI, YUAN QI NI, SANG-MOK CHA and YONGSEOK LEE