



MICHAEL AH-KIOW

GEOMATICS ENGINEER
SOFTWARE DEVELOPER
DAY TRADER/TECHNICAL INVESTOR

CONTACT

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in **Linkedin**
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🐙 **Github**
github.com/micdean19

EDUCATION

High School Diploma
Robert Thirsk High School
2013-2016

B.Sc. Geomatics Engineering
University of Calgary, Canada
2016 - 2021

M.Eng. Software Engineering
University of Calgary, Canada
2021-2022

EXPERTISE

- Object Oriented Programming
- Software Dev (Python, C++)
- Front End (CSS3 & HTML5)
- Independent Learner
- MATLAB & Prototyping
- Revision Control (Perforce, GIT)
- Problem Solving & Debugging
- Agile/Scrum Development

PROFILE

I am a Geomatics and Software Engineer in training who is passionate about making this world a better place. I graduated with a Bachelor of Geomatics Engineering and I am currently in a Master of Software Engineering at the University of Calgary. I have industry experience in software development, research and working on agile teams. Feel free to visit my website at www.drivenengineer.ca

PROFESSIONAL EXPERIENCE

Junior Software Developer Contractor

SkyIT Services - Subsidiary of GBCS Group | 2020-Present (Part Time)

SkyIT is a tech company that provides reliable, innovating, and exciting web app services to help the aviation industry overcome modern challenges.

- Research third party systems and technologies in Computer vision and IOT.
- Member of the development team that adhere to scrum principles with Kanban boards, bi-weekly sprints, and continuous improvement principles.

Research & Development Engineering Intern

Hexagon – Autonomy & Positioning | 2019-2020

At Hexagon I have worked on the development of exciting positioning technologies, from exploiting and protecting GNSS signals to:

- High Sensitivity GNSS algorithm testing, which include software development and debugging in C++, revision control using Perforce and working on an agile team with Jira.
- Development of an autonomous Car using Robotic Operating Systems (ROS), C++, Linux (Ubuntu), Python, Perforce and other Internal tools.
- Analysis, Visualization, and manipulation of massive GNSS & Inertial positioning datasets to better improve positioning algorithms.

Undergraduate Research Assistant

University of Calgary | 2018

My research consisted of applying 3D time of flight sensors to measure antler growth of reindeers at Spy Hill Campus for medical applications.

- Design and Implement a test setup using Time of Flight Cameras (Lidar technology) to monitor the growth and dimensions of Antler.
- Implemented various analysis and test scripts in C++, MATLAB and worked with industrial software development kits (SDK).

CERTIFICATIONS

- Udemy: Modern HTML & CSS
By Brad Traversy (Udemy)
- SOLID Principles: Software
Architecture & Design
By Sujith George (Udemy)
- Machine Learning A to Z
By Kirill Eremenko (Udemy)
- Python, SQL & Tableau
By 365 Careers (Udemy)
- Advanced Python
by Armendariz (Udemy)

REFERENCES

Dr. Ivan Detchev

Engineering Professor
PhD, MSc, Geomatics Engineering
i.detchev@ucalgary.ca

Darrell Anklovitch

Principal Engineer - Supervisor
Hexagon Autonomy & Positioning
Darrell.Anklovitch@hexagon.com

Sean Blair

Volunteering Supervisor
sean.blair@shaw.ca

PHILANTHROPY

Children Believe
Tom Baker Cancer Center
World Food Programme
UNICEF
The Arthritis Society
The Crohn's & Colitis Society
Plan International Canada

VOLUNTEERISM

St Peter Roman Catholic Church
Drop-In Center
The Mustard Seed
Feed the Hungry
Robert Thirsk High School
Geomatics Engineering Student Society

EXTRACURRICULAR ACTIVITIES

Vice President Academic

Geomatics Engineering Student Society I 2018 - 2019

I served as a liaison between the faculty, the private sector, and the society. My job consisted of creating research positions, host career fair and research mixers.

Engineering Student Team Member

FUSE Collective Design Club I 2016 - 2017

FUSE collective is an engineering and design club that creates, designs, and participates in real initiatives with real-world impact. I was Involved in designing a shelter for Twin Views Community Garden

Math 30-1 Tutor

Robert Thirsk High School I 2015 - 2016

I offered peer tutoring and mentorship for students struggling in math class. I was also involved in grading, attendance and in organizing study sessions.

HONORS & ACHIEVEMENTS

2016: President's Admission Scholarship. (Value: \$4,000)

Entrance scholarship to the engineering program for exceptional academic merit.

2016: Seymour Schulich Academic Excellence award. (Value: \$37,200)

Full ride scholarship to the engineering program for academic excellence.

2016: Alexander Rutherford Scholarship. (Value: \$2500)

2017: Geomatics Engineering "25th Anniversary" Award. (Value: \$2,900)

2017, 2018: Jason Lang Scholarship. (Value: \$1000)

2018: Schulich Undergraduate Student Research Award. (Value: \$6000)

2019: Sean Studer Memorial Scholarship (Value: \$1500)

2020: Finalists & Bronze at the National Geomatics Competition

Represented the University of Calgary a national engineering competition

2020: UCBeyond Scholarship 2020 (Value: \$5000):

Awarded for living above and beyond the boundaries of a chronic illness based on academic excellence, community involvement & personal ambition.

PROJECTS

Geolocation Mapping Tool

Python CLI project that plots Trajectory and errors of positioning logs.

Lidar reconstruction of reindeer's antler for Biomedical research

Utilized a Time of flight camera and their C++ API to produce a 3D lidar image of antlers in real time.

Website Portfolio (<https://www.drivenengineer.ca>)

A fully responsive website written in CSS3 and HTML5.

Building Modelling by Mobile Phone Photogrammetry

Engineering Capstone supervised by Dr Lichti. (Currently in Progress)