MICHAEL AH-KIOW

SOFTWARE DEVELOPER
GEOMATICS ENGINEER
DAY TRADER

CONTACT

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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

- Python, MATLAB & Java
- Agile/Scrum Environment
- HTML5/CSS3/JavaScript (ES6)
- Revision Control (Perforce, GIT)
- Statistics & Data Science
- Azure & AWS (SageMaker) for MLOPS
- Deep Learning (Keras, Tensorflow)
- Object Oriented Programming with Solid Principles

PROFILE

I am a software engineer and day trader who is passionate about making this world a better place. I graduated with a Bachelor of Geomatics Engineering with honors, and I am currently pursuing a Master of Software Engineering at the University of Calgary. My interests consist of finding ways to use deep learning for improving the quality of life. Learn more about me at https://drivenengineer.ca.

PROFESSIONAL EXPERIENCE

Junior Software Developer Contractor
SkyIT Services - Subsidiary of GBCS Group I 2020

SkyIT is a consulting technological company for the aviation industry. At my time at SkyIt, I was involved with:

- Research in Computer vision and IOT's for fleet management which would later be integrated into the company's product line.
- Adherence to scrum principles with Kanban boards, bi-weekly sprints, and continuous improvement principles with the development team.

Research & Development Engineering Intern
Hexagon – Autonomy & Positioning I 2019-2020

Hexagon is a global leader in providing solutions for accurate positioning, navigation, and autonomy. I was heavily involved in state-of-the-art technologies and was able to participate in the development of:

- High Sensitivity GNSS positioning which was later utilized and released in our products and internal tools.
- An autonomous car using ROS, C++, Linux (Ubuntu), Python, Perforce and other Internal tools. My involvement resulted in the project being showcase at CES 2019.
- Analysis, Visualization, and manipulation of massive GNSS & Inertial positioning datasets to better improve positioning algorithms.

Undergraduate Research Assistant
University of Calgary I 2018

Spy Hill Research group conducted research to measure growth of reindeers for medical applications using 3D sensors. I was responsible for:

- Calibrating and designing the tests using Time of flight cameras.
- The Implementation of various analysis and test scripts in C++, MATLAB
- Integrating the cameras software development kits (SDK) into our software.

CERTIFICATIONS

- Microsoft Azure AI Fundamentals
  By Microsoft Azure
- SOLID Principles: Software Architecture & Design
  By Sujith George (Udemy)
- Machine Learning A to Z
  By Eremenko (SuperDataScience)
- Deep Learning Specialization
  By Andrew Ng (DeepLearning.AI)
- 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. (Value: $300)
Represented the University of Calgary at a national engineering competition

2020: UCBeyond Scholarship 2020. (Value: $5000)
Awarded for striving beyond the boundaries of a chronic illness.

PROJECTS

Lidar reconstruction of reindeer's antler for Biomedical research.
Utilized a Lidar camera and their API to model 3D growth of antlers.

Front End Portfolio (DrivenEngineer.ca).
A fully responsive website written in CSS3 and HTML5.

Full stack development for Geospatial Analysis of Traffic in Calgary
A geospatial mapping web application built with a restful API and JavaScript to model the correlation between traffic cameras and crashes.

Accessible 3D Reconstruction by Smart Phone Photogrammetry.
Capstone which creates 3D models using images from your smart phone.