Anthony M Knight, B.Sc., P.Eng.

Software developer looking to reboot career into the field of autonomous vehicles.

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EXPERIENCE

Dec 2006 – Present	SR&ED Technical Consultant	Self-Employed

- Interview customer's research and development personnel to discover and understand the experimental development work they have conducted.
- Craft descriptions to highlight how they have fulfilled the requirements for CRA SR&ED investment tax credits.
- Specialize in claims for Cluster Computing, Computer Vision, Optics, Software development, and Cleantech
- Work with small, medium, and enterprise clients to successfully make claims reaching to millions of dollars refund per claim.

Jun 1997 – Dec 2006	Director of Software Development	The VCI Group

- Progressed from Developer to Director of software development for an IVR Chat line developer.
- Successfully transitioned the software and deployed systems to the new owner when the company was sold in 2004.
- Continuously increased the capabilities and densities of the telephony systems. In 1997 we were restricted to 72 analog line systems running on DOS. By 2004 we were supporting 700-line ISDN based systems which could run multiple products simultaneously.
- Developed a 400-line SIP based variant and ran Interop testing with Level3 and Global Crossing.
- Built an SMPP client/server to enable a txt message aggregation system and micropayment platform which was connected directly to all the major Canadian mobile carriers and via TeleNor to U.S. based carriers.
- Managed the development of an SMS based text dating program which used various novel approaches to decipher user communications, to locate nearby users, and to enable anonymous voice connections between users.

Jan 1994 – Jun 1997	Geophysicist/Hydrogeologist	Adamas Environmental Inc.
Jun 1989 – Dec 1993	Engineering/Environmental Geologist	Peto Maccallum Ltd.

- Conducted geotechnical and environmental site assessments and site remediation projects in Canada and the USA.
- Designed, implemented, and reported the results of the projects.
- Interacted with clients, subcontractors, regulatory bodies, and citizen's groups
- Maintaining control of project budgets.
- Completed computer modeling of contaminants, groundwater flow, stratigraphy, and terrain conductivity.

EDUCATION

2017-2018	Self Driving Car Nanodegree	Udacity

Completed coursework and projects in deep learning, computer vision, sensor fusion, localization, control, path planning, robotics. Capstone project used ROS to implement planning and control of a self-driving car.

1994-1997	Professional Engineering Accreditation	PEO

Gained P.Eng. designation for Geological Engineering via coursework accreditation examination program.

1984-1989	Honours Bachelor Of Science	University Of Waterloo

Hydrogeology and Geophysics. Coursework in computer science, math, physics, digital signal processing.

SKILLS

- C, C++, CUDA, Python, Perl, SQL
- Visual Studio, Github
- Tensorflow, OpenCV, ROS, Jupyter
- TCP/IP SIP, SMPP, ISDN
- Windows, Linux, Docker, Cisco CLI