DAVID MIN TAT GOY

Full Stack Web Developer/Engineer

Site: davidgoy.dev **Projects**: github.com/davidgoy | **Email**: david@davidgoy.dev

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Summary

Full stack web developer (LAMP). Founder of an electric vehicle startup. PhD research degree dropout.

Technologies

- **Front-end**: JavaScript, HTML, CSS
- **Back-end**: PHP, MySQL
- **Frameworks:** Bootstrap, CodeIgniter
- **HTTP API:** REST
- **Web hosting**: Apache HTTP Server
- **Shell scripting**: Bash
- **Version control**: Git

Projects

- **Reflect** (https://github.com/davidgoy/reflect)
  Decoupled architecture website for headless WordPress, with built-in server-side rendering capability and static page generator.

Awards

- **US patent 8612100 for invention of vehicle management control system** (2013)
  - Invented during time as a PhD research student at *The University of Sydney*
  - Enables an entire vehicle to be controlled by a single software framework running on macOS, Linux or Windows computer

- **The NEC Semiconductors Singapore Pte. Ltd. Award for Best Project Work** (2000)
  - Created during time as a Diploma in Mechatronics Engineering student at *Nanyang Polytechnic*, Singapore
  - Software written in C that enabled engineers to simulate the dynamic performance of micromouse robot without having to build a physical prototype

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Businesses

- **Full Stack Web Developer** (2011 - Now)
  Min Tat Goy (self-employed)

- **Founder** (2006 - 2013)
  Goy Advanced Automobile
  Australian electric vehicle startup. Joined by more than 10 Australian and international team members. The startup did not succeed. However:

- ◦ Successfully raised first round of funds to pay for consultation with *Lotus Engineering*
- ◦ Vehicle designed by team was featured in *Top Gear Australia* magazine, *Auto Salon* magazine, *Sydney Morning Herald* newspaper and *The Age* (Melbourne) newspaper

Employment

- **Technical Delivery and Support - Applications** (2018 - Now)
  States of Guernsey then later outsourced to *Agilisys Guernsey*

  Provided technical support for applications used by various departments of the States of Guernsey. Also involved some system administration of Active Directory, SharePoint, IIS web server, Windows Server and SQL Server

- **Manufacturing Engineer** (2004 - 2007)
  Silverbrook Research Pty. Ltd., Australia

  Researched and implemented mass production methods that could be potentially used to manufacture an ultra-high speed printhead developed by the company

  Achievements
  - Developed a solution to clean one of the key components that improved the part's yield from approx. 50% to nearly 100% at the cleaning stage of the manufacturing process
  - Improvised a solution to remove unwanted residue from a key component's coating, increasing yield from approx. 8% to 90% at an important stage of the manufacturing process and resulting in significant time and cost savings

- **Associate Engineer** (2000 - 2001)
  Chartered Semiconductor Manufacturing Ltd., Singapore

  Lithography/process department:
  Troubleshoot process and machine related issues in the production line, performed quality checks on silicon wafers and develop strategies to minimise defects/increase manufacturing yield

  IPM layout/test structure department:
  Drafted semiconductor structures using CAD tool for new test module designs

  Achievements
  - Lithography/process department:
    Successfully implemented new program criteria for automatic defect detection, significantly reducing errors/false alarms and thus production down time by approx. one hour per day
  - IPM layout/test structure department:

Developed software that automated the drafting of semiconductor structures, enabling the department to produce a month's worth of component design drawings in less than five hours

Education

- **Doctor of Philosophy (Engineering and IT) by Research - Withdrawn** (Dropped out in 2013 to focus on business)
  The University of Sydney

- **Bachelor of Engineering (Materials and Mechanical Systems) with Honours** (2004)
  The Australian National University
  - Faculty of Engineering and IT Student Services First Year International Scholarship (2002)

- **Diploma in Information Technology (Website Development) With Distinction** (2011)
  TAFE NSW
  - 26 distinctions

- **Diploma in Engineering (Mechatronics) with Merit** (2000)
  Nanyang Polytechnic, Singapore
  - 15 distinctions
  - Top 10% of the graduating cohort for the diploma course
  - Sponsorship under *Chartered Semiconductor Manufacturing Ltd.* (1999 – 2000)
  - Top Student Award, Mechatronics Engineering (1999/2000)
  - Top Student Award, Mechatronics Engineering (1998/1999)
  - The NEC Semiconductors Singapore Pte. Ltd. Award for Best Project Work (2000)