



# DAVID MIN TAT GOY

*Full Stack Web Developer/Engineer*

Site: [davidgoy.github.io](https://davidgoy.github.io) Projects: [github.com/davidgoy](https://github.com/davidgoy) | Email: [david@davidgoy.dev](mailto:david@davidgoy.dev)

## Summary

Australian full-stack web developer/engineer living in Guernsey, Channel Islands. Skilled in web applications development, servers, databases and systems engineering. Built a number of SaaS (Software-as-a-Service) over the years, from architecture to deployment. Founder of an electric vehicle startup. PhD research degree dropout.

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## Technologies

- **Proficient in LAMP stack**
    - Front-end: HTML, CSS, JavaScript and Bootstrap
    - Back-end: PHP, MySQL and CodeIgniter
    - Shell scripting: Bash
  - **Knowledgeable in full-stack JS**
    - Front-end: Vue.js
    - Back-end: Node.js, Express and MongoDB
  - **Knowledgeable in hosting environment setup and maintenance**
    - OS: Linux
    - Web server: Apache HTTP Server
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## Projects

- **Reflect** (<https://github.com/davidgoy/reflect>)  
Reflect is a standalone web app that you can install and use with WordPress to create an instant, decoupled architecture. Reflect functions as the front-end while WordPress functions as the headless CMS (i.e. back-end). Out of the box, Reflect comes with server-side rendering and static site generation capabilities.
  - **Reflect Form Mailer** (<https://github.com/davidgoy/reflect-form-mailer>)  
Addon for Reflect. Automatically makes plain HTML forms submittable.
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## 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
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- 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/Engineer** (2011 - Now)  
*Min Tat Goy* (sole trader)
  - **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
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## 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,

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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

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**Education**

- **Doctor of Philosophy (Engineering and IT) by Research - Withdrawn**  
(Dropped out 2013 to pursue 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)