



DAVID MIN TAT GOY

Full Stack Web Developer/Engineer

Site: davidgoy.github.io Projects: github.com/davidgoy | Email: 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.

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 at *Agilisys Guernsey*

Provides technical support for a wide range of applications used by various departments of the States of Guernsey (i.e. the government of the Bailiwick of Guernsey, Channel Islands)

- **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
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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)