

ALEX LUNDIN

Design Engineer
Wattstopper, Legrand
2240 Campbell Creek Blvd
Plano TX, 75074

TELEPHONE (469) 394-5175

EMAIL alexander.m.lundin@gmail.com

January 21, 2019

Your job posting for caught my attention as I have the necessary programming skills to produce work immediately. I'm electrified about the possibility of being part of your team. I'm a self-starter, I taught myself AutoCAD LISP to become as efficient as possible for my current employer. I'm familiar with creating a system around a desired workflow, I built Legrand's AutoCAD process from the ground up. Title blocks all the way to expert level automation, like custom data extractions for drawing generation later.

Since I am self-taught in the workplace, I think all the above these skills will transfer to any language that is needed in the future. At the University so far, I have studied Java, C++, C, Python and RStudio. I am also familiar with Automated Testing strategies and frameworks. These include Selenium and Junit.

Each semester I applied what I learned to the work force. Auto LISP is missing a regression test suite, so I also wrote my own, similar to Selenium.

I will receive my Bachelor's degree in Software Engineering by May of 2019.

I have 4 years professional experience where I developed code in the work force. I gained many soft skills like collaboration, communication both written and verbal as well as working under pressure.

I hope to hear from you soon because I think this would be a win win for both parties. Please feel free to contact me for a follow up interview at 469-394-5175 or email at alexander.m.lundin@gmail.com.

Sincerely,

Alex Lundin

Video demonstration attached on next page.

Regression Test Suite

<https://autode.sk/2sByZYq>

I learned about regression tests at the University of Texas at Dallas. However, AutoLISP is the language I currently work in, and it does not have an automated testing suite. So, I built my own.

- Continuous integration and delivery
- Automatically runs regression tests, to ensure the LISP build is successful
- I embedded 1 failure, to show how tests appear, for either scenario, pass or fail
- Passes and fails are separated cleanly
- Helps in reporting on test coverage
- Ensures a standard for all releases of my LISP code

The screenshot displays a 'Test Progress' section with 'Runs: 7' and 'Fails: 1'. A green progress bar is shown. Below this is a 'LISP Function Name Tree with Results'. The tree is divided into 'Passed' and 'Failed' categories. The 'Passed' category lists several functions, including 'ATTRIBUTE-GLOBAL-SYNC1', 'ATTSYNC-KEEP-ATTRIBUTES-IN-PLACE1', 'BLOCK-ATTRIBUTE-PROPERTY-MODIFIER1', 'BLOCK-ATTRIBUTE-PROPERTY-MODIFIER2', 'BLOCK-ATTRIBUTE-PROPERTY-MODIFIER3', 'BLOCK-INSERT-WITH-ATTRIBUTE-VALUES1', 'BLOCK-REPLACE-KEEP-DYNAMIC-PROPERTY-VALUES1', and 'BLOCKS-EXPORT-ALL-TO-INDIVIDUAL-DRAWINGS1'. The 'Failed' category lists 'BLOCKS-REDEFINE-FROM-SOURCE-FOLDER1'. A detailed view of a failed test shows 'Test 1 Passed' and 'Reason 1 is, export worked'.

Control bar, built with open dcl

<https://autode.sk/2SWDVCJ>

This adds to the usability of my source code, from the User side, being able to see all commands, in one place.

- Provide easy access to entire LISP glossary
- Reads LISP source code, and displays user information in the text box, about the command
- 8 tabs
- 18 buttons, that dynamically change on tab selection

The screenshot shows a 'Control Bar' with tabs for 'User', 'Floorplan Setup', 'Layout Blocks', 'Attributes', 'Cables', 'Script Writers', 'Generators', 'AutoCAD Dev', and 'Control Bar Config'. The 'User' tab is active, displaying a row of buttons: PDF2, WSLY, 2CTB, WSPS, XRP, BIND, PDFS, H, H2, WOFF, WFRZ, LK, UNLK, WTHW, WCUR, TBE, TBI, and SAVE. Below the buttons is a text box with the text 'Check Display Command Info box below and click any command button above to display information about the command'. There is a checkbox labeled 'Display Command Info (Turn off to send command to the AutoCAD command line)' and a text area labeled 'Command information display..'. A red status icon is visible in the top right corner.