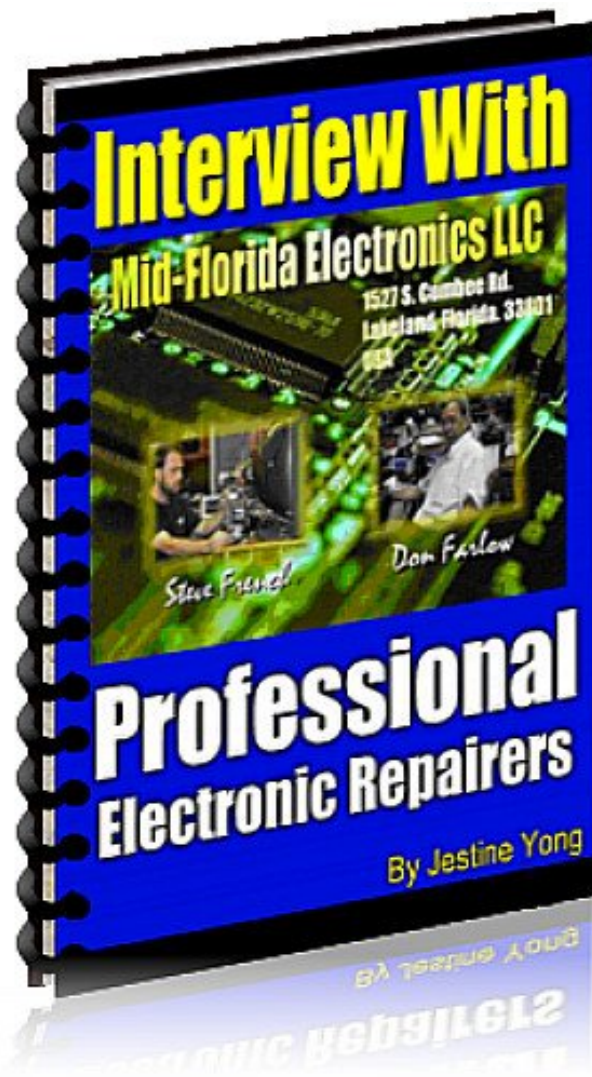


Interview with Professional Electronic Repairers from Florida USA

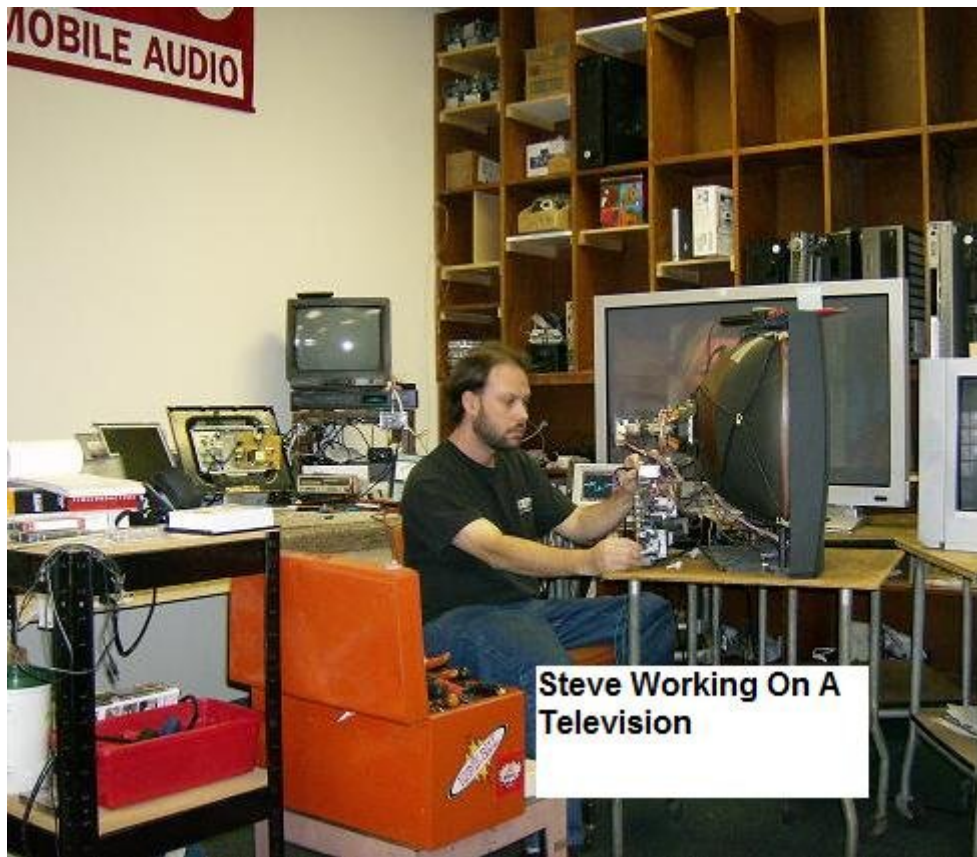


Brought to you by Jestine Yong

<http://www.TestingElectronicComponents.com>

**Feel free to pass this short report interview to your repair
friends or colleagues.**

Part I



Jestine Yong - *How long have you been in the Electronic Repair line and at what age you own your first repair shop?*

Steve - 18 years. I owned my first repair shop at the age of 18. I actually got interested in electronics at a very young age though. I was fascinated at how all those “pretty-colored” parts could do such wondrous things. I was hooked at first glance.

Jestine Yong - *Where are your company located and what is the name of your company?*

Steve - I currently manage a new repair shop that just opened in Lakeland, Florida (USA) called **Mid-Florida Electronics, LLC**. This shop is an expansion of the business I've worked for the past 8 years. I've always run the electronic repair department and we have grown to the point where we needed our own storefront and repair space. And that's where we are now. It may be a "new business" but it's far from new, only a new name and location.



Jestine Yong - *What is your education background?*

Steve - High school diploma is the extent of my formal studies. I took basic electronics courses in my last three years of high school. However, I actively work to keep up with technology and to learn more about the things I already deal with. So, the real answer is that my usable education is ongoing to this day. That's the one thing we all share as repairmen.

Jestine Yong - *Does the courses help you in Electronic repair?*

Steve - In some ways, yes. The thing with the basic electronics classes I took is that it taught me some basics but it didn't teach me anything about how to apply that knowledge to actual working situations. I already knew most of what was taught in the courses because I'd been studying and tinkering on my own for years already. If I wanted to design circuits it would be a different story. But as it was, I still had to obtain my practical knowledge in the field, from other technicians, books and on my own.

Jestine Yong - *Have you conduct any electronic repair courses before? And what is the name of the courses?*

Steve - I have taught some electronics and repair techniques to others but never in a formal class setting.

Jestine Yong - *Do you have a website?*

Steve - Not at the moment. Currently I'm an administrator for the website www.tvrepairtips.org. If you wish to join you are always welcome to do so. Our membership is restricted, however, to people currently working in the television (and

monitor) repair business. We have a forum and a repair tips database. A lot of our members (such as myself) work on many types of equipment, not only televisions.

Jestine Yong - Which electronic repair website you frequently visited and why do you like it?

Steve - Tvrepairtips, of course. But I am also a member of Spyderman's forums for TV repair techs and I regularly read the material on and sent out by you and some of your related sites. I feel it's important to be open and to learn from other repair technicians. I love to be exposed to new ideas and methods. What better way to improve your skills?

I've also learned some things from sites like <http://shelbytv.resourcez.com/>, <http://noahotec.com/>, <http://wa6ati.com/>, <http://www.e-repair.co.uk/> and <http://www.repairfaq.org/REPAIR/>, to name a few.

Jestine Yong - *What are the Electronic Equipment that you can repair?*

Steve - I repair practically every type of consumer electronics. Some of the products I work on include: TVs, home stereos, computer monitors, microwave ovens, video game consoles, professional audio equipment, DVD players and more.



Jestine Yong - *Which type of Electronic Equipment you consider yourself expert in?*

Steve - Probably Playstation 2 game consoles. After that, maybe microwave ovens and home stereo equipment.

Jestine Yong - *How much time do you spend on equipment before you give up? Why do you give up?*

Steve - Well, Mr. Yong, that's a hard question to a precise answer to. It really depends on the value of the equipment. You've got to consider how much you can charge for the repair to know how much time you can realistically dedicate to any given job. For example, I don't mind spending 4 hours when I know the payoff may be worth it. But if I'm working on a low priced item, such as a VCR, I just can't justify spending more than about 45 minutes to an hour because I know that I can only get \$20-25 to do the repair. So it's really a matter of value.

That being said, I still find myself spending too much time on something every so often. Then again, some repairs are very quick and simple so it tends to balance out on average. But I try to get a general idea of what's wrong as quickly as possible. Then I'll give the customer an estimate that will cover the amount of time and parts I foresee the job taking. Parts cost and availability is a big factor when deciding how much time to spend on something. If I find bad output ICs in a stereo receiver, I'll check a few preamp and power supply parts then go ahead and quote a price. You don't always need to find every bad part to give an estimate, only the major parts and any others that is likely to have failed. This can save valuable time. Especially when you feel the price of the parts might exceed the value of the equipment and make the customer decline the repair.

Jestine Yong - *What kind of test equipment do you use in electronic troubleshooting?*

Steve - My most used pieces of test equipment are: Digital multi-meter (DMM), oscilloscope and capacitor ESR meter, but I own a large assortment of test equipment. I feel it's important for a technician to have and be able to use many types of test equipment. Without the proper tools, even the most knowledgeable repairman will be stumped far too often.

Jestine Yong - *What's your favourite test equipment and why do you like it?*

Steve - **I love my new 200 MHZ 2 channel digital storage oscilloscope.** It gives me a lot of capabilities that I wouldn't have otherwise. The more types of measurements you are able to make, the better off you are. And honestly, the beautiful color LCD screen makes me all warm and fuzzy inside.



Jestine Yong - *What was the last electronic book and magazine you read?*

Steve - I read **Nuts & Volts and Popular Electronics** on a fairly regular basis. I have a nice sized library of electronics books and magazines that I refer to every now and then but, lately, I've been re-reading the books "Using the Triggered Sweep Oscilloscope" and "Troubleshooting with the Dual-Trace Scope", both by Robert L. Goodman (TAB BOOKS, Inc.).

Jestine Yong - *Generally on average how many types of electronic equipment you can repair in a day?*

Steve - I average around 6 units a day. They tend to be an assortment of all kinds of equipment.



Jestine Yong - *Would you kind to share to ERG members what are the procedures that you use in order to repair no power symptom in a Television?*

Steve - I first perform a complete visual inspection. Are any capacitors oozing, swollen or blown apart? Are there any bad solder connections in the power supply, on the flyback transformer, any heat sink-mounted components, etc? Are any components burnt? Next, I check some major components, such as the horizontal output transistor, fuses, and main regulator. I look for proper standby voltages, B+ at the collector of the horizontal output transistor, activity in the switch mode power supply and see if the microprocessor oscillator is active. I then use the basic info I've gathered to determine where to go next.

However, with all of these new flat panel TVs and monitors out there, you've got to completely re-think the way you approach troubleshooting. But in the case of a no power condition, I also perform an ESR test on all electrolytic capacitors in the power supply and test semiconductors for obvious shorts. Also, it's useful to look for the +5 VDC standby voltages at the power/standby switch.

Jestine Yong - *Does your company have any contracts (or appointed as an Authorized Service Centre) with any major brands of equipment?*

Steve - We are an authorised warranty service center for a number of brands of consumer and professional electronics brands, including **VocoPro, Mackie, Crate and Ampeg**. But there are more that we aren't able to advertise quite yet because we're still in the process of transferring the contracts over to the new business name. We are also actively working on obtaining several more major name brand warranty contracts.

Speaking of warranty contracts, I strongly advise any shop to pursue obtaining at least a few. Not only does that get you on the manufacturer's referral list and gain you access to parts and inside information but, it gets you listed on the company's website, in owners' manuals, etc., meaning lots of free advertising and new customers.



Jestine Yong - *How is your repair business nowadays?*

Steve - We have been quite busy with both wholesale and retail repairs.

Jestine Yong - *Do you encourage electronic repairers to diversify into repairing more electronic equipment-If yes then why?*

Steve - An important key to survival in today's electronics repair business is to have the courage to try new things. If you restrict yourself to working on only one type of product then you risk running into a situation where you run out of work and/or miss out on a lot of great opportunities in the repair industry. Or you get left behind as trends and technology changes. Don't over-extend yourself but don't pigeonhole yourself either. The more types of equipment you can repair, the more likely you are to find something that you really shine at, can make you money repairing and that will keep you busy when everything else is slow. After all, we're all in this business to make money. Fun is fun but the bills still have to be paid.

Jestine Yong - *Do you meet regularly with other electronic repairers to discuss about electronic problems and solutions?*

Steve - Only on the Internet and with Don, my other technician. **The sad truth is that most technicians and repair shops view all outsiders as the enemy.** I hate that way of thinking. I can understand not wanting your competitors to get "too good" but it really only hurts yourself in the long run.

Jestine Yong - *Do you do your own R & D to find a better solution in electronic repair, for example like coming out with your own way of solving a particular circuit problem?*

Steve - Yes, I often do. Sometimes the answers you need are very hard to come by or simply not available so doing your own research and figuring out ways to troubleshoot unusual and unfamiliar systems is a must. It also makes you a better technician in the end. I've even designed and built several pieces of test equipment to help make my job easier and the time spent was well worth it. **I've shared some of my designs and test solutions on tvrepairtips.org.**



Jestine Yong - *What are the biggest problems you are facing in the Electronic repair business nowadays?*

Steve - That's easy: **parts and information availability**. The way I see it, we - as repair techs - are in a constant battle against the equipment manufacturers. We reply on fixing their equipment to make a living. But they rely on selling new units and hate having guys like us prolonging the life of equipment already out in customers' homes. As a direct result, the manufacturers are usually of little help when it comes to service information and technical advice. And more and more brands are nearly impossible to repair because replacement parts are simply not available to us. The problem is that the customers don't always understand these things. They assume that we have access to everything and that every TV (for example) is the same inside. Nothing is farther from the truth. The truth is that each and every new make and model means a challenging learning curve for us as technicians. That's the way it has always been and always will be.

To make things worse, the engineers are constantly redesigning the circuits to keep guys like us on our toes. It's a matter of "keep up or catch up" and both can be difficult to do.

Jestine Yong - *Have you come across any electronic equipment that you can't repair? And how do you solve it?*

Steve - Absolutely! As much as I'd like to say I can fix anything, the fact is that no one can do it all. All we can do is try our best and apply the knowledge and resources we have in new and creative ways. This is another case where the value of the equipment comes into play. If I can't narrow the problem down to the component level (or if the parts are not available) then I'll try to quote the customer for replacement of the entire circuit board. Of course, I try to avoid that but sometimes it's the only way.

Another person with a fresh perspective or different troubleshooting strategy might quickly catch something that I've missed or didn't even consider to be a possible cause. So I'll sometimes let another technician have a try at it, either in our shop or another. We have ties to several other shops in town. In fact, we repair a LOT of equipment for other repair shops; they are some of our biggest accounts. So you see, if you learn to make professional relationships you will find that your competition doesn't have to be the enemy. They can actually be your greatest allies.



Jestine Yong - *How do you promote your repair business?*

Steve - We have a radio commercial campaign going on right now. We also rely on our signs, word of mouth, our wholesale repair accounts, and referrals from other businesses we have ties to. We are also listed on a number of websites for various brands as an authorised service center.

Soon we will be starting a targeted mailing program to **churches, bars, night clubs, hotels, motels and restaurants**. If you're going to repair any kind of equipment, look for places that use that equipment in large numbers. Then you have a potential customer base to go after. Think of all the TVs in a **typical Hotel or sports bar**.

Jestine Yong - *Do you have any tips for anyone who wants or plan to set up their own Electronic repair shop?*

Steve - Make as many contacts as you can; you need sources for parts and information. Don't get in over your head with bills. I will take time to be where you need to be (as far as income goes) so find a storefront that you can afford. You can always grow larger as needed. Treat your customers the way you would want to be treated.

Spend the money and get the test equipment you need. And finally, never stop learning and improving your troubleshooting abilities. No matter how good you are, you are guaranteed to become outdated if you don't actively keep up with technology.

And finally, one of our best moves was to charge a non-refundable bench fee up front. Don't underestimate the importance of the bench fee. It's paid when the customer leaves the equipment and helps cover the time and some of the parts required to give a

halfway accurate estimate. Then, if they have the unit fixed we apply the prepaid deposit towards the repair bill.

For many years most shops in our area gave free estimates. I was one of those. But you just can't afford to do that anymore. New equipment is taking more and more time to research and diagnose and we can't work for free. When you spend hours just to obtain critical service information and diagnose the problem then the customer doesn't want to pay the price, who loses on the deal? That's right, the one who wasted all that time and effort.

Some shops think they are doing the customer a service to give free estimates. I feel that you actually do yourself a dis-service with that strategy. Those days are gone. If they won't pay the bench fee you know they won't pay the repair bill. Doctors don't give free diagnostics and neither do we.



Jestine Yong - *What advice would you give to a beginner who wishes to join this trade?*

Steve - Learn to use the test equipment you've got in an efficient manner to save yourself valuable troubleshooting time. If you can find an easier way to narrow down the fault more quickly then it's well worth learning to do so. Even the most basic test equipment can be used in advanced ways if you take the time to learn how.

But don't forget to learn the basics, such as electrical theory. And remember the old saying: "Your most important test equipment is your brain." Analytical thinking can often take you right to the problem much faster than testing random components. Be curious. Be safe.

Jestine Yong - *What advice would you give to an experienced or professional electronic repairer?*

Steve - **Never stop learning**. There are plenty of books and websites - such as Jestine Yong's network of repair sites and the one I help administrate (www.tvrepairtips.org)

- where you can expand and share your knowledge with other repair technicians. Today's repair world is not the same as it was 10 years ago. And the same holds true for the future. That's why it's so important to keep actively learning. You must work hard to keep up with modern technology because that's where the future is at - with or without you.

Jestine Yong - *Did you make mistakes that others could learn from?*

Steve - I've made plenty of mistakes. It goes with the territory. One that I've recently learned from is to always show the customer that their flat panel TV/monitor is working before you allow it to leave the shop. Those things are easily damaged if they are handled carelessly or if they fall over. If the customer cracks the screen while moving it they may think you caused the damage. Or they may try to blame you, knowing it was their own fault. Showing them the unit operating will prevent you from being blamed and save you a fortune and lots of headaches. Trust me.

Jestine Yong - *What is your future plan for your electronic repair business?*

Steve - Our immediate plan is to become more established at our new location and to finish setting up the new shop the way we want it. Long-term plans include building our authorised repair status, increasing our parts inventory, growing our customer base and reaching the point where we need more technicians.

Jestine Yong - Would you kind to share your email to ERG members just in case if they have anything related to electronic repairs to ask you?

Steve - mfdsteve1@verizon.net

Jestine Yong - *Thanks Steve!*

Steve - I'd like to thank you, Mr. Yong, for all that you do for your fellow electronic repair technicians. Thank you for allowing us this opportunity to be featured in your article. And finally, thank you so much for your time. Have a wonderful day.



- Steve French (Manager: Mid-Florida Electronics, LLC. 1527 S. Combee Rd. Lakeland, Florida. 33801 USA

Part II

Interview with Don Farlow-Professional Electronic Repairer from Florida USA



Jestine Yong - *How are you Don?*

Don - I am fine. Thank sir very much.

Jestine Yong - *How's life as an electronic repairer?*

Don - It is my preference.

Jestine Yong - *How long have you been in the Electronic Repair line?*

Don - I have 20 years experience as a repair technician.

Jestine Yong - *What are the Electronic Equipment that you can repair?*

Don - I can repair Home stereos, telephone equipment, video game consoles, professional audio equipment, computers, wireless communication equipment, more.

Jestine Yong - *Do you learn the repair on your own or from a Guru/courses/forum/books and etc?*

Don - Somewhat all the above.

Jestine Yong - *What is your education background?*

Don - High school diploma, two (2) years vocational school, two (2) years community college.

Jestine Yong - *How much time do you spend on equipment before you give up? Why do you give up?*

Don – Sometimes hours, sometimes days. I don't like to give up on personal matters. In business you have to draw evaluations. But if the customer is willing and the unit is coming back to life I will put what time it takes to make the satisfaction on both sides.

Jestine Yong - *What's your favourite test equipment and why do you like it?*

Don - **Tektronics 210 Oscilloscope and up**. I like the unit's high frequency reading, hfe capability, internal storage, and computer transfer cable hook-up.



Jestine Yong - *Which electronic repair website you frequently visited and why do you like it?*

Don - I mostly upgrade, work-on, and repair computers and such. I'm not much of a webber.

Jestine Yong - *What was the last electronic book and magazine you read?*

Don - **Popular electronics**

Jestine Yong - *Do you do your own R & D to find a better solution in electronic repair, for example like coming out with your own way of solving a particular circuit problem?*

Don - Certainly!

Jestine Yong - *Generally on average how many types of electronic equipment you can repair in a day?*

Don - Depends on how many phone calls I deal with during the day, how many walk-in customers, how many pick-ups, and what types of equipment. Some days 1, some days 3 some days 5.

Jestine Yong - *Do you meet regularly with other electronic repairers to discuss about electronic problems and solutions?*

Don - Just Steve and a friend of mine name Gary Morris. I used to work with him at **Protel and GTE**.



Jestine Yong - *What are the biggest problems you are facing in the Electronic repair line nowadays?*

Don - **Parts availability in the game console industry.**

Jestine Yong - *Have you come across any electronic equipment that you can't repair? And how do you plan to solve it?*

Don - I don't mess with Television too much mostly because of bulk. Pain in the butt. But I think Steve plans on changing that.

Jestine Yong - *What advice would you give to a beginner who wishes to join this trade?*

Don - **Go to school, pay attention, dive into all of it, and don't be afraid to work on any of it.**

Jestine Yong - *What is your future plan for your electronic repair career?*

Don - Stick with Steve for 20 or so years.

Jestine Yong - Would you kind to share your email to ERG members just in case if they have anything related to electronic repairs to ask you?

Don - Certainly! DFLF5@AOL.COM

Jestine Yong - *Thanks Don!*

Don - Thank you sir, Mr. Yong, for your time and energy. I appreciate the opportunity to be a part of this. Again, thank you sir.



Did you find this interview useful?

I hope you found this interview useful. **Feel free to pass it on to a friend or colleague.** I've put a lot of time and effort into writing this interview.

Thanks and have a nice day!



Jestine Yong

<http://www.TestingElectronicComponents.com>