

*Letter to the Editor*

## **Roxxy the “Sex Robot”—Real or Fake?**

**This is an updated version of an article first published in 2010.**

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Late in 2009 publicity started appearing in the media about a “sex robot” developed by a New Jersey entrepreneur, Douglas Hines. A website, [www.truecompanion.com](http://www.truecompanion.com), proudly proclaimed,

“We have been designing “Roxxy TrueCompanion,” your truecompanion.com sex robot, for many years, making sure that she: knows your name, your likes and dislikes, can carry on a discussion and expresses her love to you and be your loving friend. She can talk to you, listen to you and feel your touch. She can even have an orgasm!”

Other amazing claims on the truecompanion.com website include:

“She also has a personality which is matched exactly as much as possible to your personality. So she likes what you like, dislikes what you dislike, etc. She also has moods during the day just like real people! She can be sleepy, conversational or she can “be in the mood!”

“Roxxy also has a heartbeat and a circulatory system! The circulatory system helps heat the inside of her body.”

“She can talk to you about soccer, about your stocks in the stock market, etc.”

“We have been working on Roxxy since 2001. The first few years were focused mainly on the artificial intelligence portion of Roxxy TrueCompanion. Roxxy is the 9th version of our sex robot. Our first sex robot, Trudy, was built in the 1990s and was not designed for resale. Rather, she was a test bed to refine techniques which we would later use in Roxxy and Rocky TrueCompanion.”

For millions of men eagerly awaiting the next major technological development that would enhance their sex lives, the announcements about Roxxy probably seemed almost

too good to be true. But the press launch of Roxxy, which took place at the Adult Entertainment Expo in Las Vegas on January 9th, 2010, posed more questions than answers.

Before examining some of these questions I should first state my credentials for instigating this investigation. I have been researching the subject of sex with robots in a serious academic manner since 2003. I did a rather thorough job of examining the relevant literature for my book *Love + Sex with Robots* and for my PhD thesis *Intimate Relationships with Artificial Partners*. During the course of that research I unearthed some 450 relevant publications from the fields of psychology, sexology, robotics, artificial intelligence, and others, ranging from academic papers to articles in popular media. These publications are all mentioned in the bibliography to my thesis. I also exchanged emails, over a period of more than three years, with many experts in these fields. Not once did I come across the name Hines or any mention of his project. Nowhere on the Internet can one find a mention (prior to late 2009) of a sex robot developed in New Jersey (where Hines is based) or a mention of what he claims is an earlier sex robot developed by him—“Trudy.” How come? Furthermore, I am acquainted with many prominent experts in the fields of artificial intelligence and robotics, most of whom are based in North America, and not one of them has ever mentioned Hines or his project to me. Why?

Another thing that has surprised me was that, until I read about Hines and sought him out, he had not contacted me, even though my book has been extensively publicized on the Internet and via more than 120 radio, TV, newspaper, and magazine interviews in the USA, and I am rather easy to find in a few minutes of help from Google. Perhaps I am being immodest in claiming to be the world’s leading expert on this subject, but so far as I know no one else has given lectures on the subject at academic conferences, and no one else has written a comprehensive book on the subject or made it a topic for a master’s degree or PhD. So, would it

not be logical and sensible for anyone developing a sex robot to make contact with me in the hope of learning something useful? When Hines was asked by a journalist, in December 2009, if he had contacted me, his reply was that he had not been able to locate me. How come?

My suspicions have been further aroused by the implications of the claims Hines has been making for Roxxy's technical capabilities. If Roxxy can do everything alluded to on the [truecompanion.com](http://truecompanion.com) website, then Hines's technical achievements would appear to have surpassed those of MIT, Stanford University, Carnegie Mellon, and all of the world's other leading research establishments in fields as diverse as speech recognition ("She hears what you are saying"), human-computer conversation ("Have a Conversation or Sex—It is Up to You!"), artificial emotion and personality (Roxxy is claimed to provide its owners "with companionship and unconditional love"), and other research areas within the fields of artificial intelligence and robotics. How come Hines has achieved so much in the world of artificial intelligence without having had, so far as one can tell, so much as a single paper published on the subject?

And is it reasonable to believe that Hines could really have achieved all this? In my opinion it is not, despite his claim, "I was with Bell Labs Artificial Intelligence."

In December 2009, the [truecompanion.com](http://truecompanion.com) website announced that Roxxy would be launched at a press conference on January 9th at the 2010 Adult Entertainment Expo in Las Vegas. The Las Vegas demonstration can be viewed on YouTube.com at [www.youtube.com/watch?v=r0eRQ\\_0C-I](http://www.youtube.com/watch?v=r0eRQ_0C-I) where it appears that touching Roxxy's hand causes it to exclaim that it "likes holding hands with you," but what does that prove? It only proves that an electronic sensor is linked to some sort of recorded sound output. It is not a demonstration of the speech technology that would be needed in a talking conversational robot. Furthermore, the YouTube video and Hines's behavior during the demonstration prompt the following question: How much of the technology was inside Roxxy and how much in the computer or whatever electronics there was located behind the prototype?

Another surprising element of Hines's publicity is the statement that Roxxy cost between US\$500,000 and US\$1 million to develop. I have been in the business of developing consumer electronic products for the past 30 years or so, and have spent a considerable amount of time and money in the development of leading-edge human-computer conversation software (which is just one part of the jigsaw of technologies needed to produce a Roxxy), and I simply cannot understand how Hines managed to keep the development costs of Roxxy so low. How did he do it for so little? After all, a product such as the one described on his website would be a huge and very expensive development task, especially in view of all the high level expertise that would be needed and which Hines claims to have employed for his project:

"True Companion has pulled talent from organizations in the US focused on movie productions, military products as well as people from the leading artificial intelligence and animatronic institutions."

And while we are on the subject of costs, how is it that Roxxy, with all of its "capabilities," is advertised at US\$6,500 when a non-sex robot (with very few degrees of freedom) from a leading American robotics company, Hanson Robotics, costs US\$50,000 and more? How can Hines offer so much more for so much less?

Now let me comment on a little "due diligence" checking that anyone can carry out an investigation into Hines's business, courtesy of Google.

The business is based in Lincoln Park, New Jersey, at the same address as another Hines business—Data Software Solutions LLC (<http://www.datasoftwaresolutions.com>). Looking at the website of Data Software Solutions gives a good impression at first—it is a professionally designed site and gives all the appearances of being the site of a company with substance. The company claims to be run by "World class professionals committed to providing your solution on time and within budget," and there are pages within the website devoted to the company's claimed activities in accounting, field staff automation, reporting, e-commerce, and other business areas. Yet despite having studied these pages somewhat carefully, I simply cannot understand exactly what it is that Data Software Solutions does, and the site raises some rather obvious questions: Who are the clients of Data Software Solutions? What projects has the company carried out? And why is it (despite claims on the website that Data Software Solutions has offices in New York, California, and Bangalore) that Google was unable to help me find anything about any of those offices, and a check through the telephone directories for all three locations fails to find any mention of them? Is this not all rather suspicious?

Hines's launch in Las Vegas has attracted quite a lot of media attention and, presumably, the attention of many prospective customers for Roxxy's supposedly seductive charms. And at the beginning of February 2010 Hines's website started to take orders for Roxxy, while advertising the product at a "sale price" of US\$6,495, which it claims represents a reduction of US\$500. Accompanying the invitation to place an order, the website also presents a "Master Agreement" that extends to 15 clauses of legalese covering the purchase of Roxxy and subscriptions to associated services. When I last checked this part of the website (on February 6th), the "Contents list" at the head of the Master Agreement omitted any mention of the "Returns, Refunds and Cancellation Policy" (clause 12.1), which makes it clear that once production commences the purchaser cannot get any of his money refunded. This begs the question, why would any customer be willing to part

with their money without any possibility of recovery when there has been no public demonstration or independent product review of a fully working Roxxy that can perform as advertised?

Since the truecompanion.com website started taking orders for Roxxy, various news websites have been issuing comments such as,

“Roxxy won’t be available for delivery for several months, but Hines is taking pre-orders through his website, truecompanion.com, where thousands of men have signed up.”

If there have indeed been thousands of men so far ordering Roxxy, what does this mean for Hines and his business? Answer: sixes of millions of dollars, all for a product the advertised capabilities of which have yet to be demonstrated to the buying public. And with availability being several months away, if it turns out that Hines cannot deliver what he promises, he will meanwhile have accrued payments for several months worth of orders before the first thousands of unlucky customers discover that they have wasted their money.

So to anyone who is thinking of ordering a Roxxy, I would respectfully suggest this: First ask Hines to permit you to visit his office at 7 Mason Avenue, Lincoln Park, NJ, or if you live too far away to want to travel to Lincoln Park, then find a friend or relative who is near enough. Whoever visits should ask to see a proper demonstration of the conversational and other skills that are so enthusiastically proclaimed on the truecompanion.com website. **But if you do not believe it is necessary to arrange such a visit, and if you have complete faith in the advertised claims for Roxxy, please let me know. I own a very nice bridge in Brooklyn that I’d like to sell you.**

If we check the Wikipedia entry for Roxxy (last visited on March 6, 2013), we find the following:

“According to Douglas Hines, Roxxy garnered about 4,000 pre-orders shortly after its AEE reveal in 2010. However, to date, no actual customers have ever surfaced with a Roxxy doll, and the public has remained skeptical that any commercial Roxxy dolls have ever been produced.”

If it is true that Hines received 4,000 pre-orders, then he would have raked in something over US\$20 million in fees for those orders, since his website demands payment in advance. But as the above extract from the Wikipedia entry indicates, to the best of my knowledge, no Roxxy customer has surfaced to demonstrate such a product, and no demonstration that I know of, in which the advertised features of Roxxy were shown to be working, has ever been publicized by reputable media. Yes, Hines has been interviewed by the *Huffington Post* and others, but there still appears to be no sign three years after the “launch”

of Roxxy, of a demonstrable product that can talk about Manchester United (as Hines claimed Roxxy could do) or perform in the other ways that Hines’s advertising blurb claims that Roxxy can do.

I shall end this update with a few extracts taken from more recent postings, by others, on Fembotcentral.com.

By gmiceo » Fri, Nov 30, 2012—9:00 a.m.

“Sex only goes so far—then you want to be able to talk to the person,” Hines said at a 2010 demonstration of the Roxxy bot.

“Hines, an artificial intelligence engineer, told HuffPost Live that he got the idea for the creating a humanoid companion after he lost a friend in the September 11 attacks. He said he wanted to develop a software application for the deceased’s children that would “replicate” their father’s personality. When he decided to monetize the concept, Hines found a natural market in the adult entertainment industry.”

Wow! He sure does change his story around to whatever is convenient. That’s the first time I heard that he had created this because of 9/11 reasons. How does that play with the fact that he created his first “robot” in 1993? It says that on his own website. We must now assume that Mr. Hines is psychic and saw these needs coming.

**The “new” TrueCompanion.** By PsychoKirby » Fri, Sep 24, 2010—5:28 a.m.

“Well, it seems our good friend Douglas Hines is back with a brand-new bottle of snake oil. I signed up to receive e-mail updates from True Companion back before it was clear it was all a big scam. Here’s what the e-mail says it can do now.”

- A New Beautiful New Face
- Light Design—60 pounds
- Motion of Legs, Head, Hips, and Body to Create Outstanding Experience (see website for demo)
- Hands Which Can Grip
- Enhanced Detail of Skin and Lifelike Feel
- Expanded Artificial Intelligence and Communication Abilities
- Ability to Rent Her in Select Markets Initially and Additional Markets in the Future
- Expanded Worldwide Affiliate Reseller Program with Aggressive Margins for Revenue Sharing
- Limited Time Reduction in Price, Down Below \$7,000 (through this Sunday)

We also have reduced the cost to place your order to 1/4 of the original amount we required! You can also have virtual sex online through her with one or more people!

**A link to his blog, with a “video demonstration.”** A few things to note:

– Roxxy’s movements consist of nothing but moving her head up and down and thrusting forward and back. While

it's definitely better than a static figure, this is still just simple animatronics. It's nothing as innovative as Doug claims Roxxy is. Disney figured out how to do this in the 60s. Hell, you can make a machine that moves repeatedly like that yourself for a small fraction of what it would take to buy a TrueCompanion bot.

– When he removes Roxxy's wig, he reveals that she *still* has a big gaping hole where her neck should be.

– While we do see a picture of Roxxy's new face, which I admit is an improvement (although something like that shouldn't be a problem to begin with), note that we never actually see her face in the video demonstration itself. I wouldn't be surprised if that was just the head of a RealDoll or something.

– Still no demonstration of her superduper advanced AI. How much longer is this stupid joke going to keep up?